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1/55

FIG. 1

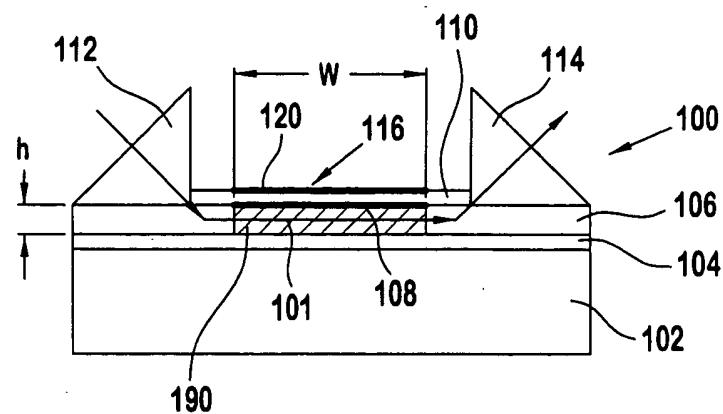


FIG. 2

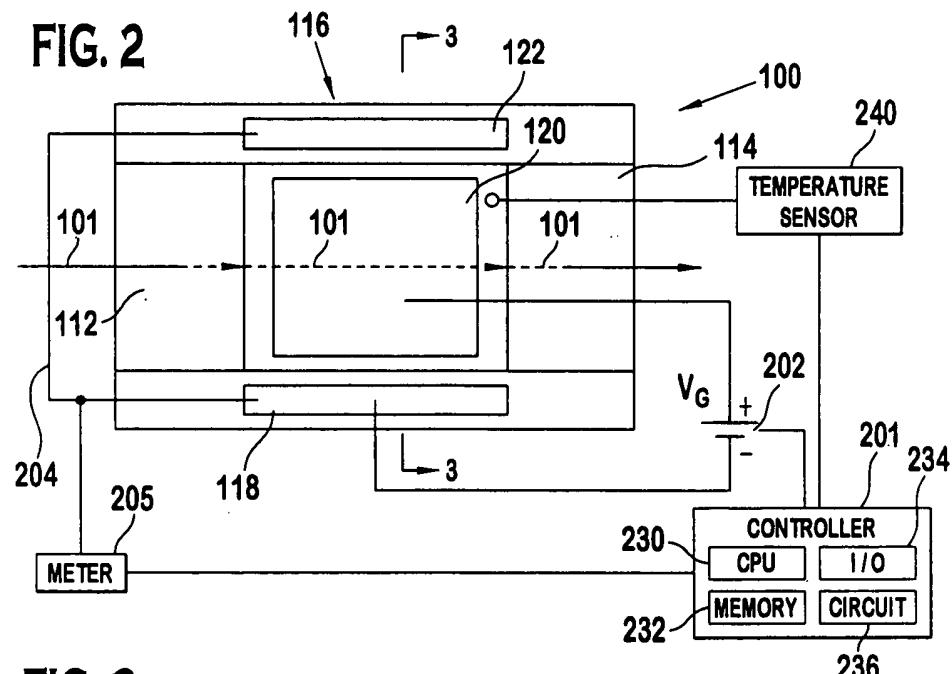


FIG. 3

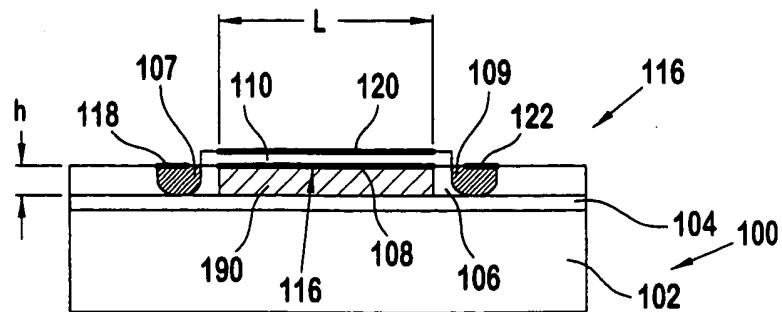


FIG. 4

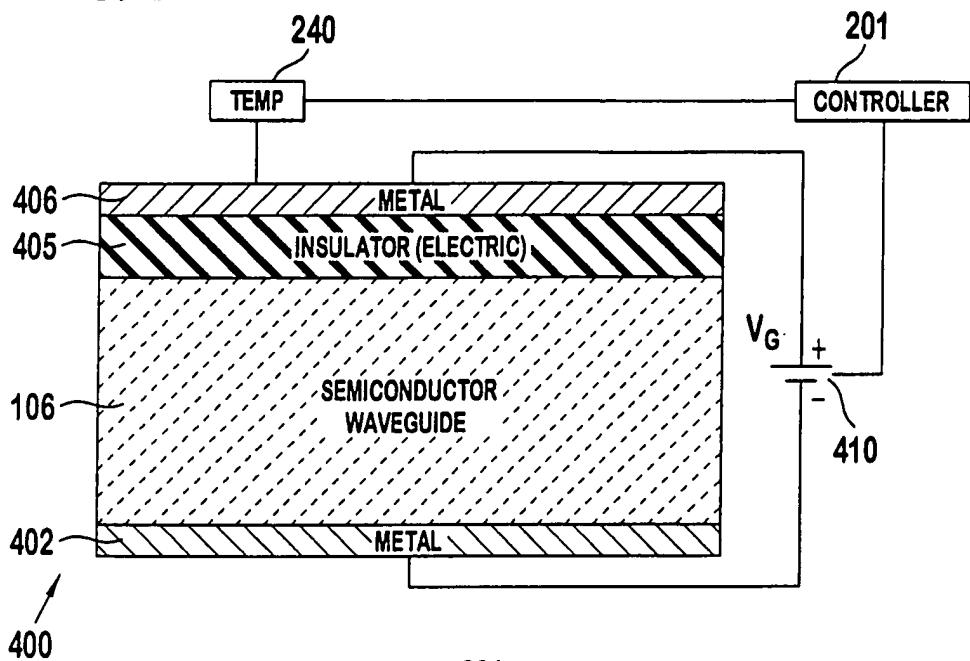
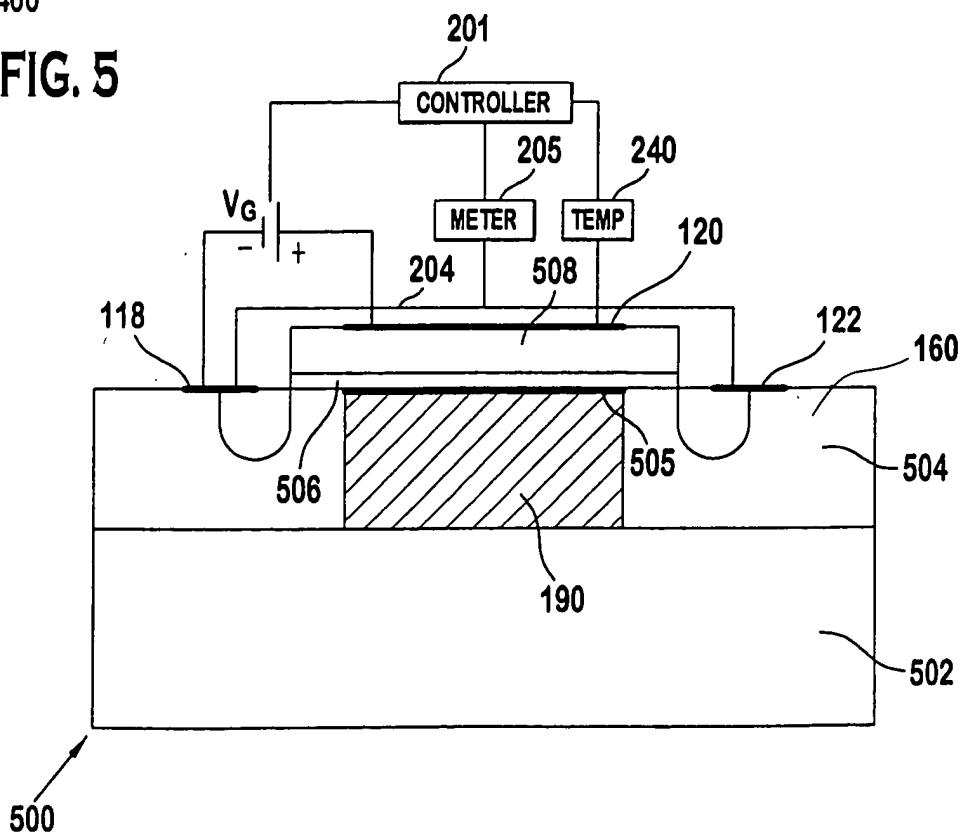
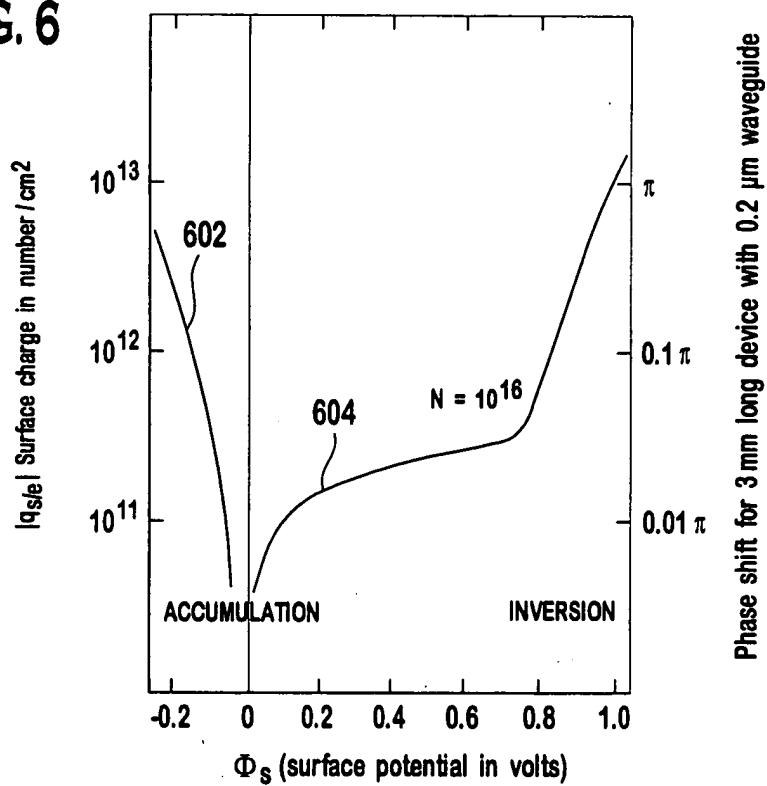


FIG. 5



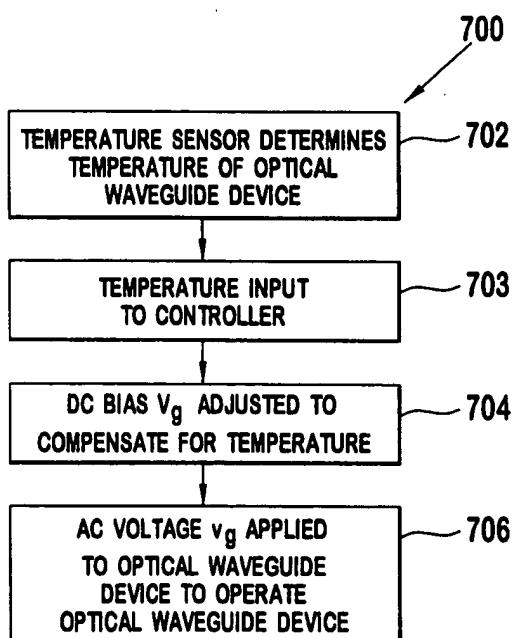
3/55

FIG. 6



Phase shift for 3 mm long device with 0.2 μm waveguide

FIG. 7



4/55

FIG. 8

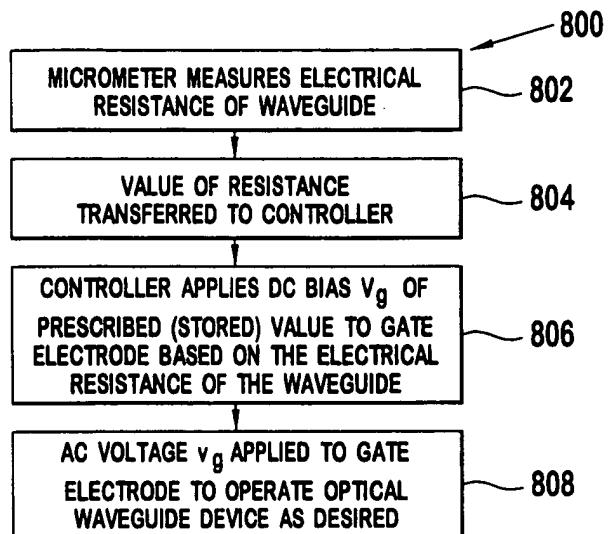


FIG. 9

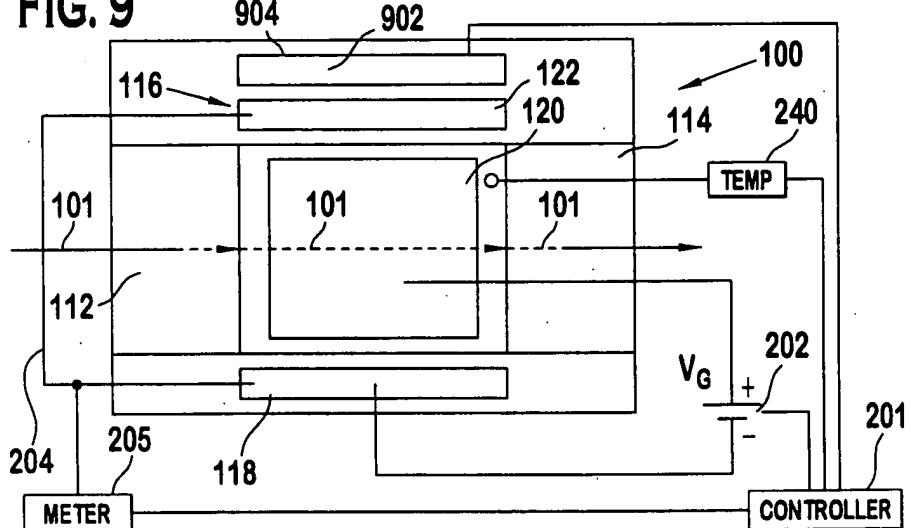


FIG. 10

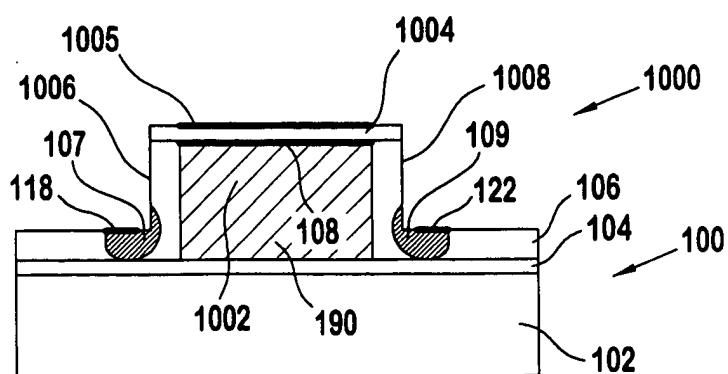


FIG. 11

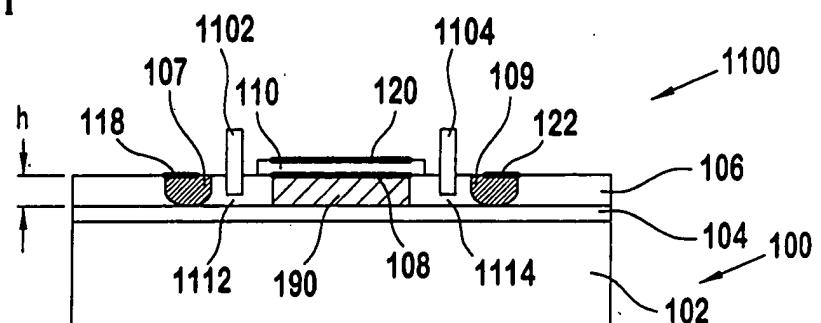


FIG. 12

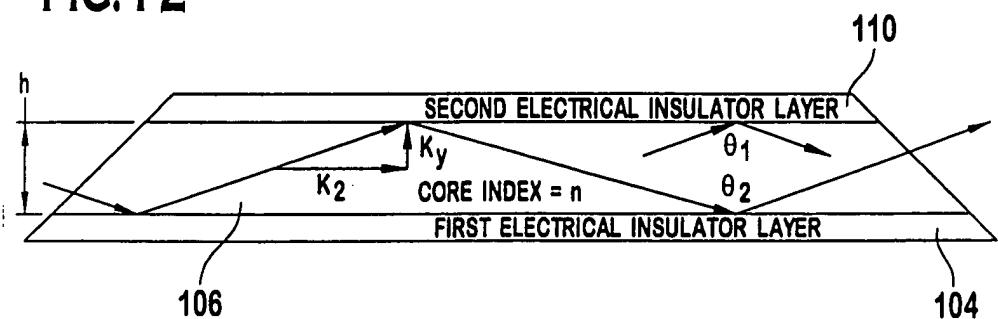
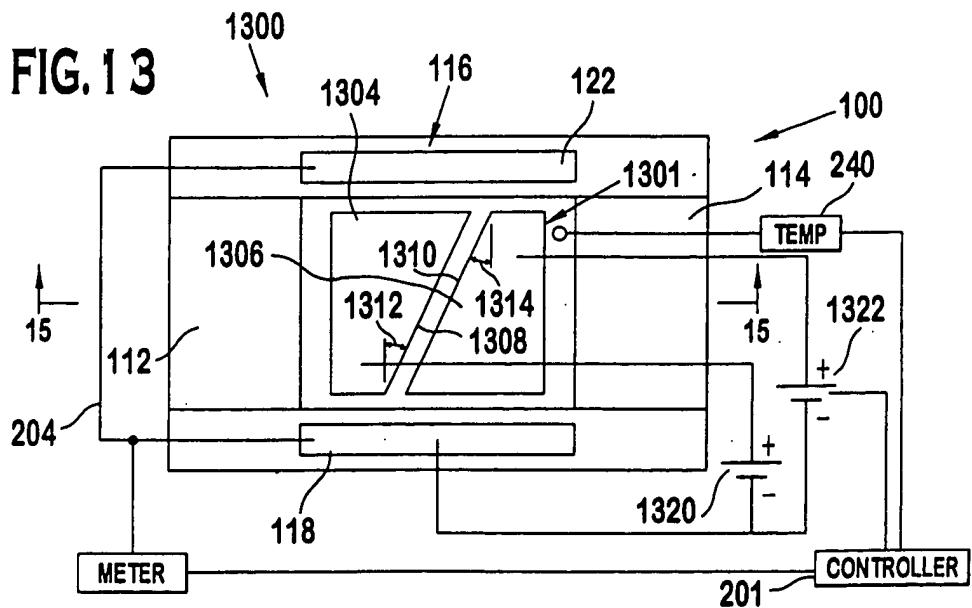


FIG. 13



6/55

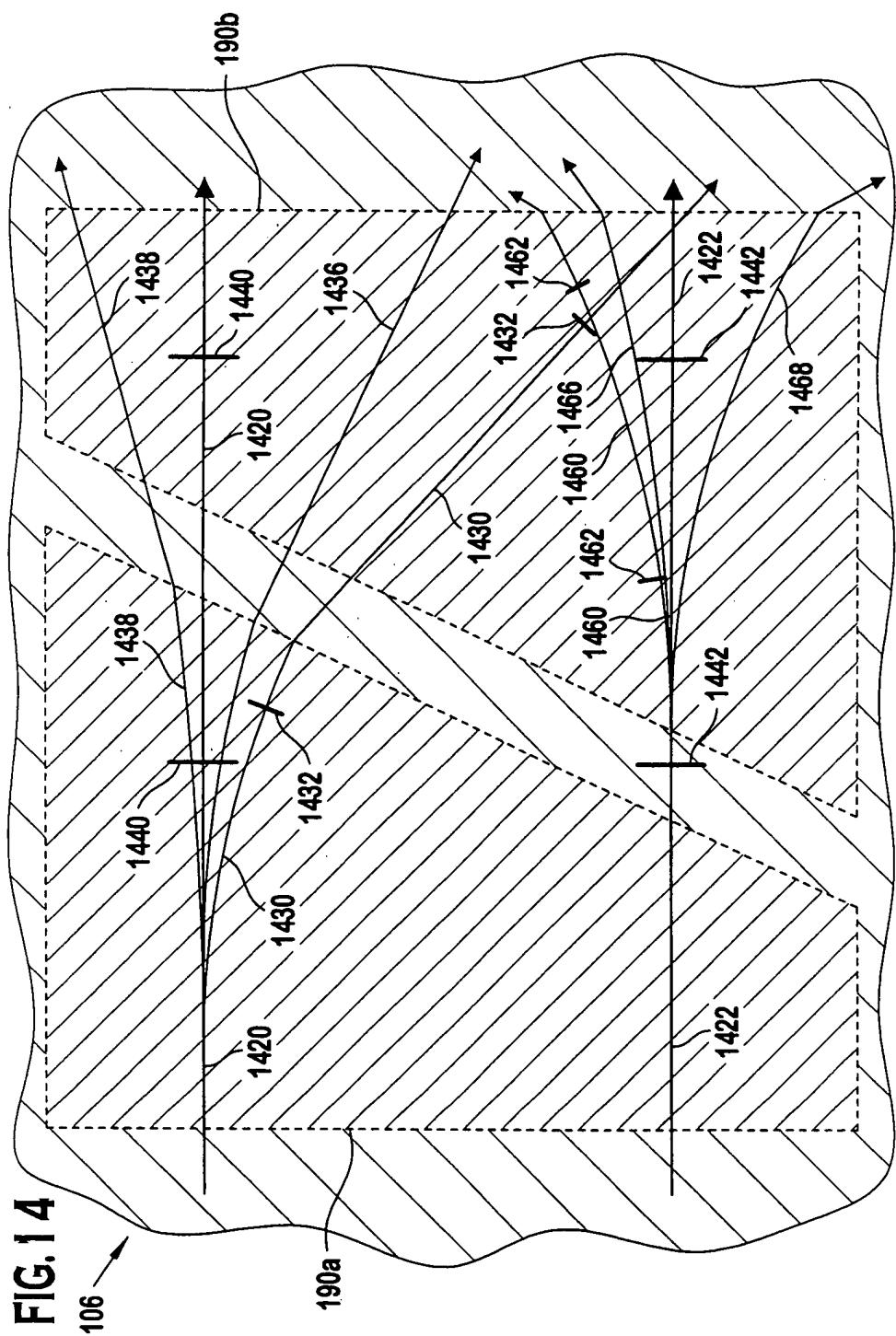


FIG. 14

7/55

FIG. 15A

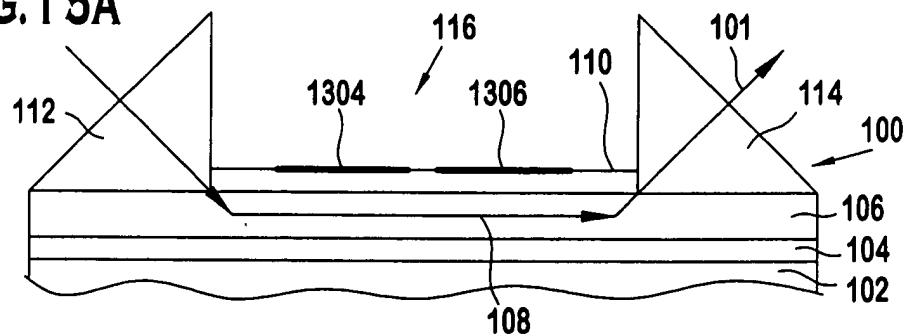


FIG. 15B

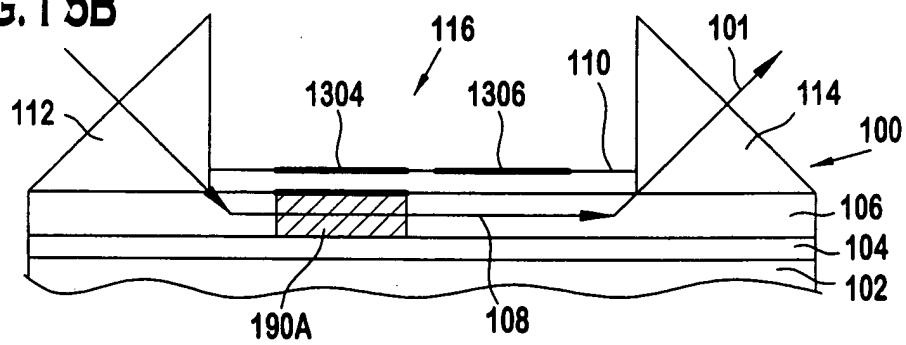


FIG. 15C

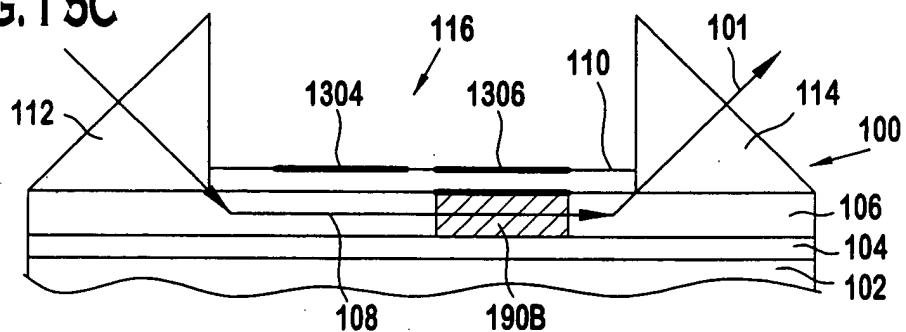
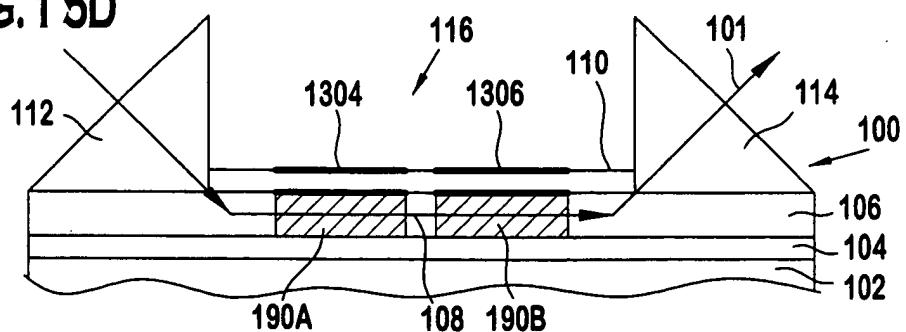


FIG. 15D



8/55

FIG. 16

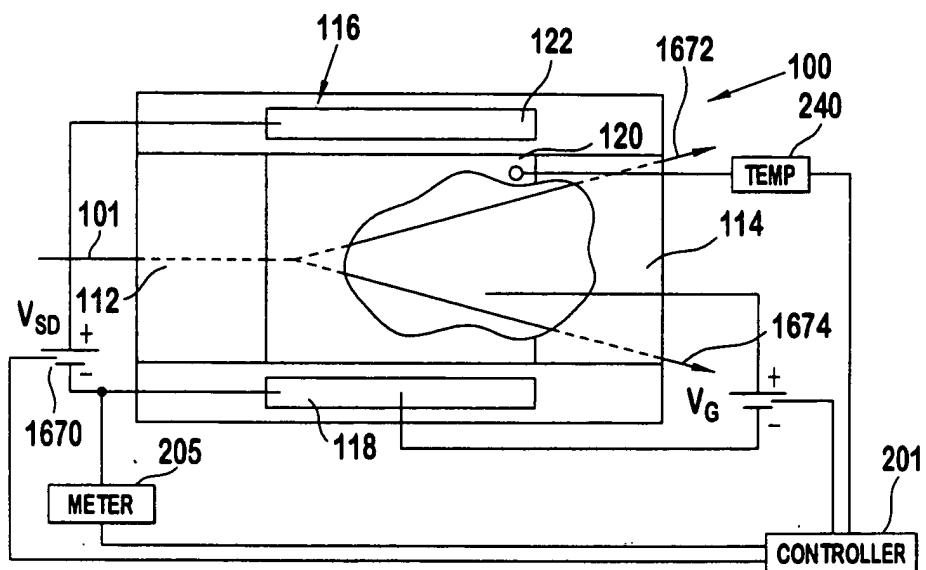
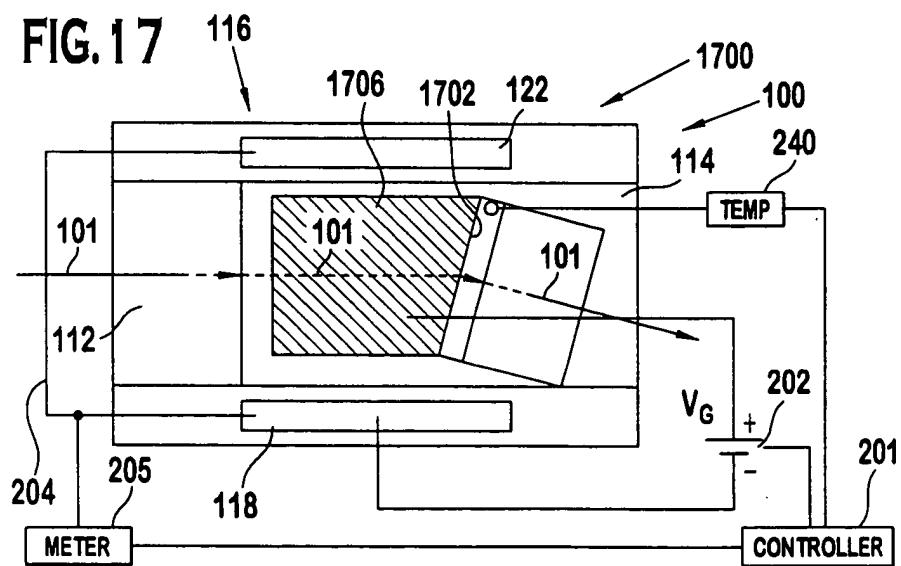
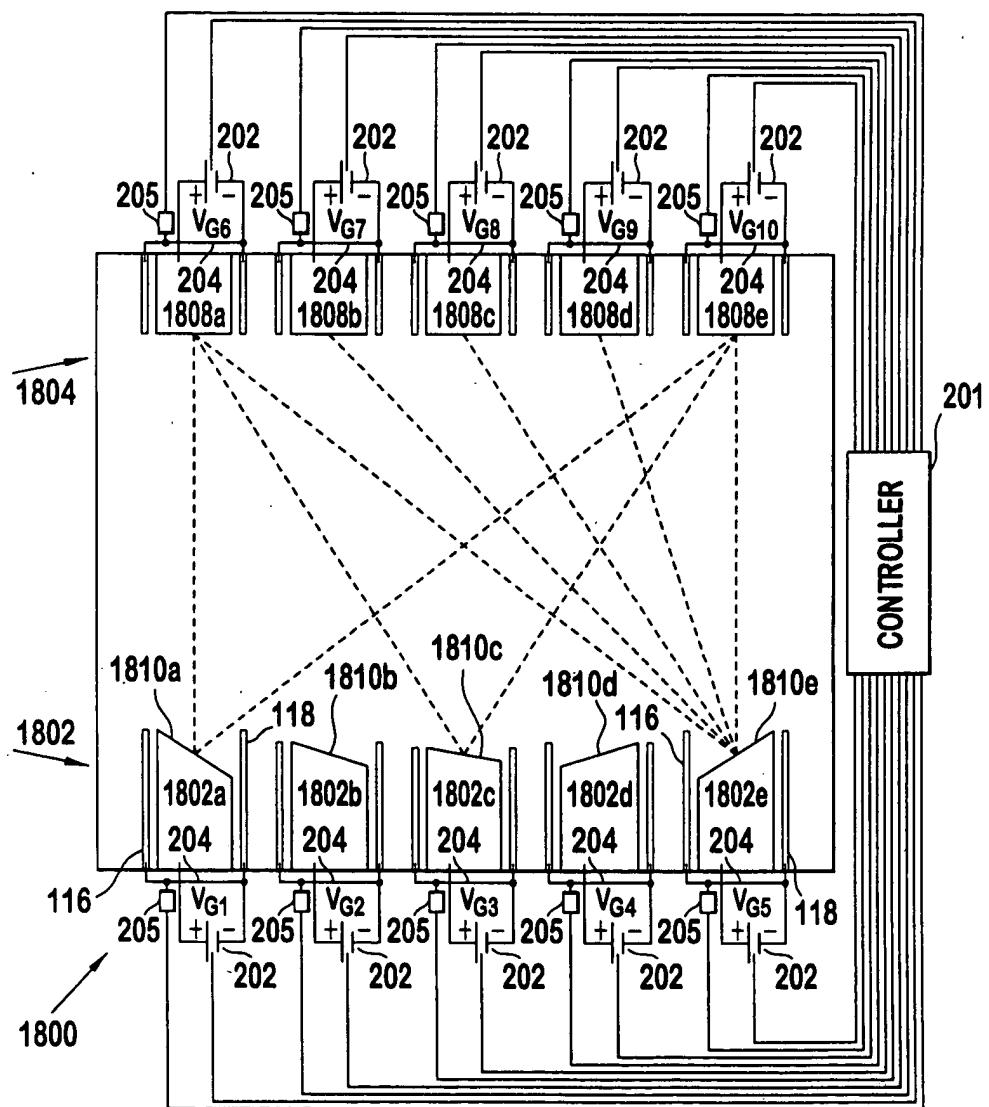


FIG. 17



9/55

FIG. 18



10/55

FIG. 19

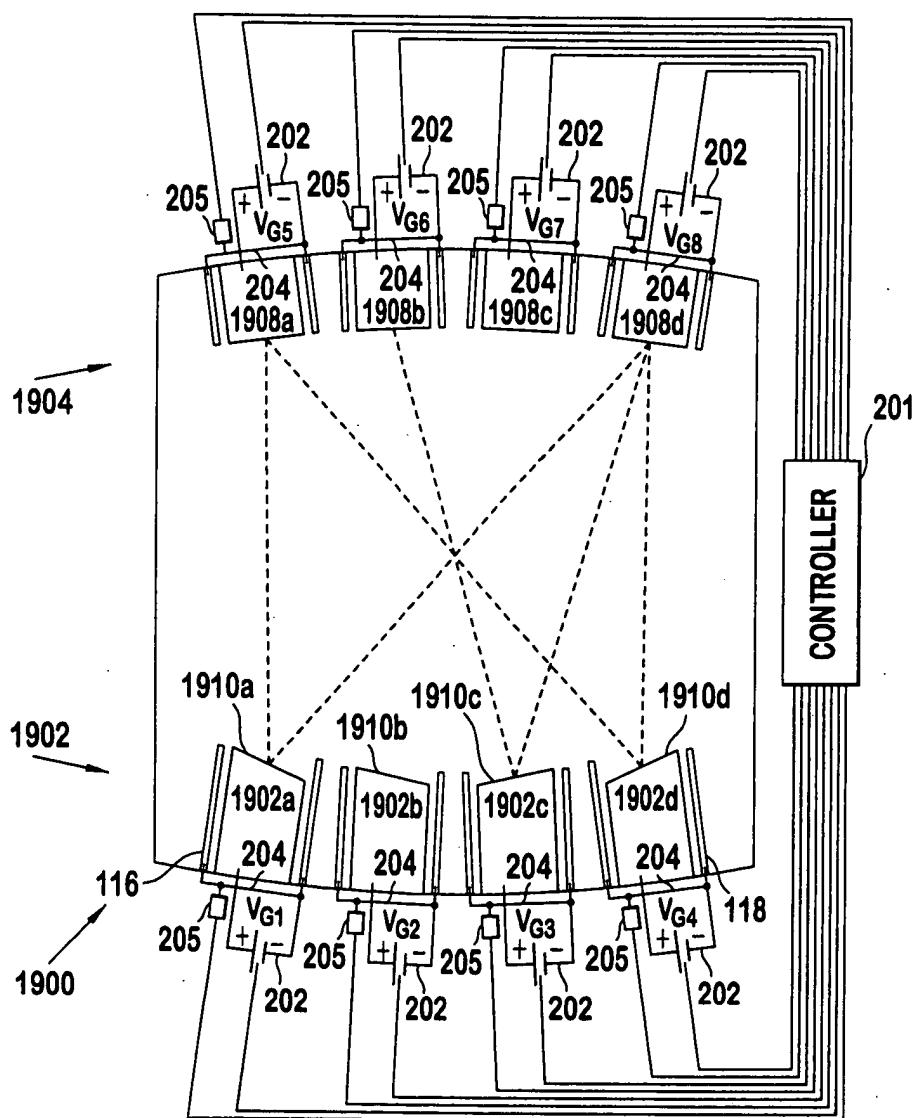
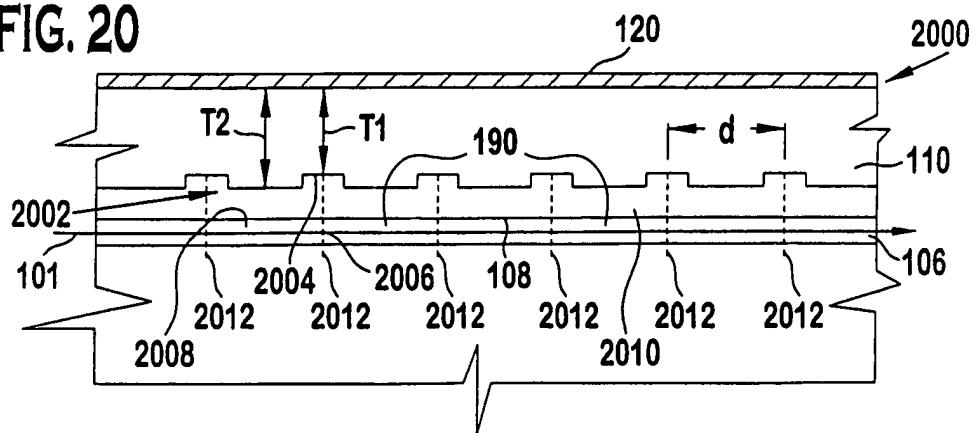
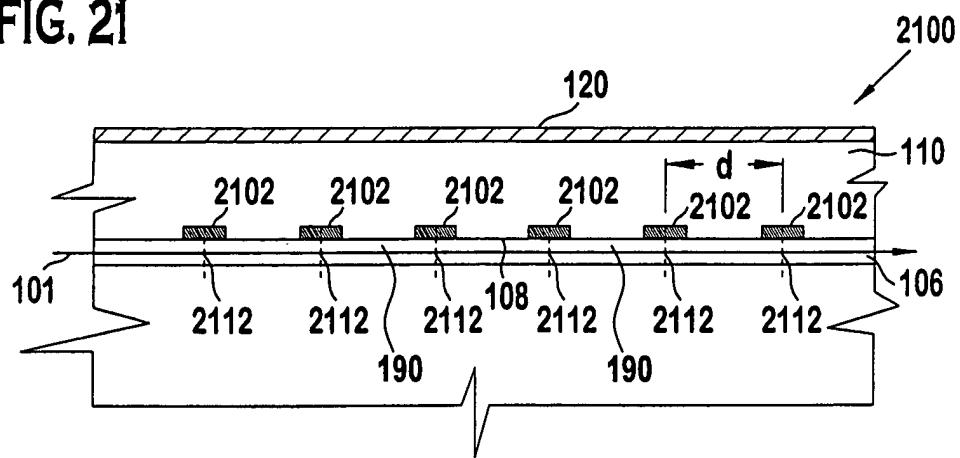
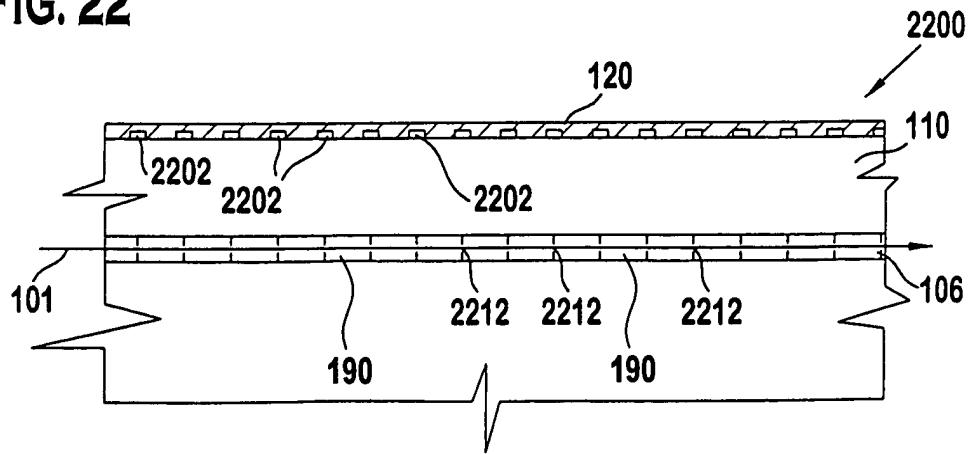


FIG. 20**FIG. 21****FIG. 22**

12/55

FIG. 23

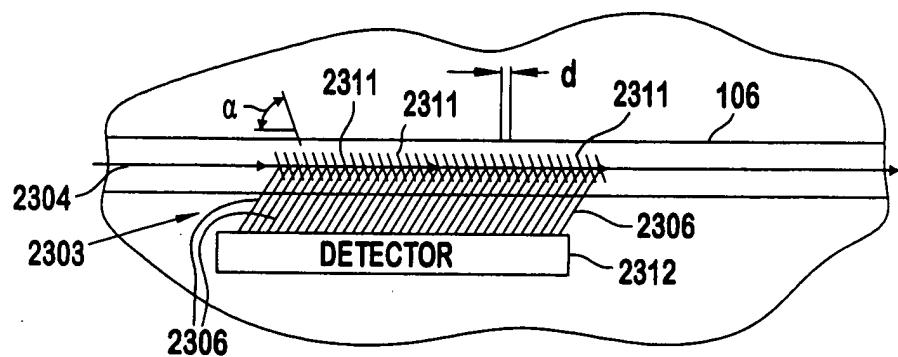
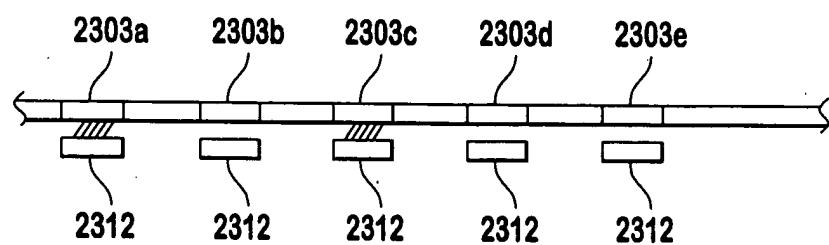


FIG. 24



13/55

FIG. 25

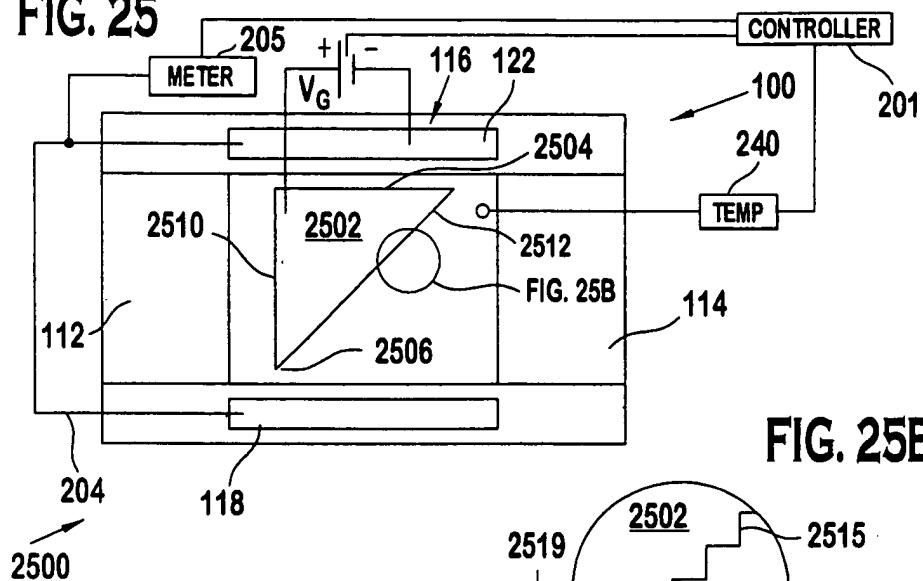


FIG. 25B

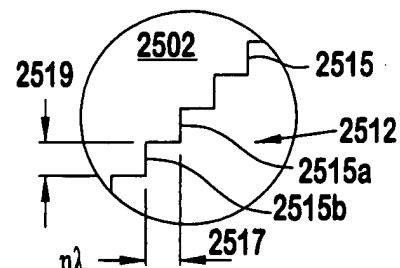
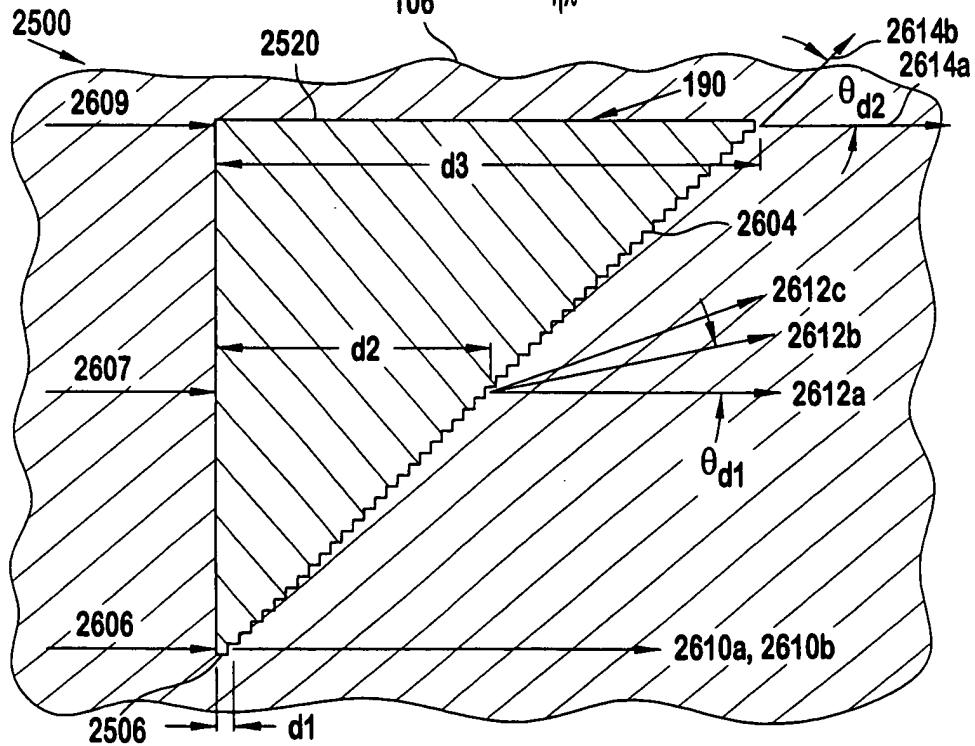


FIG. 26



14 / 55

FIG. 27

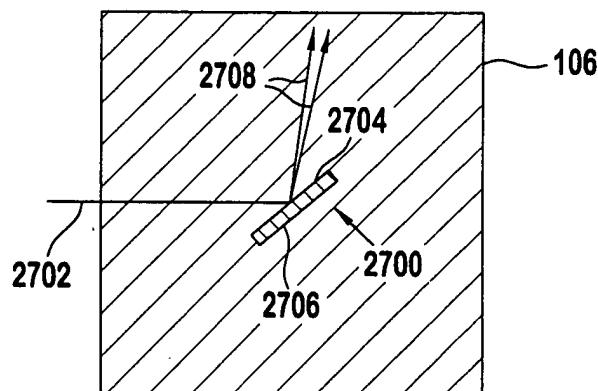


FIG. 28

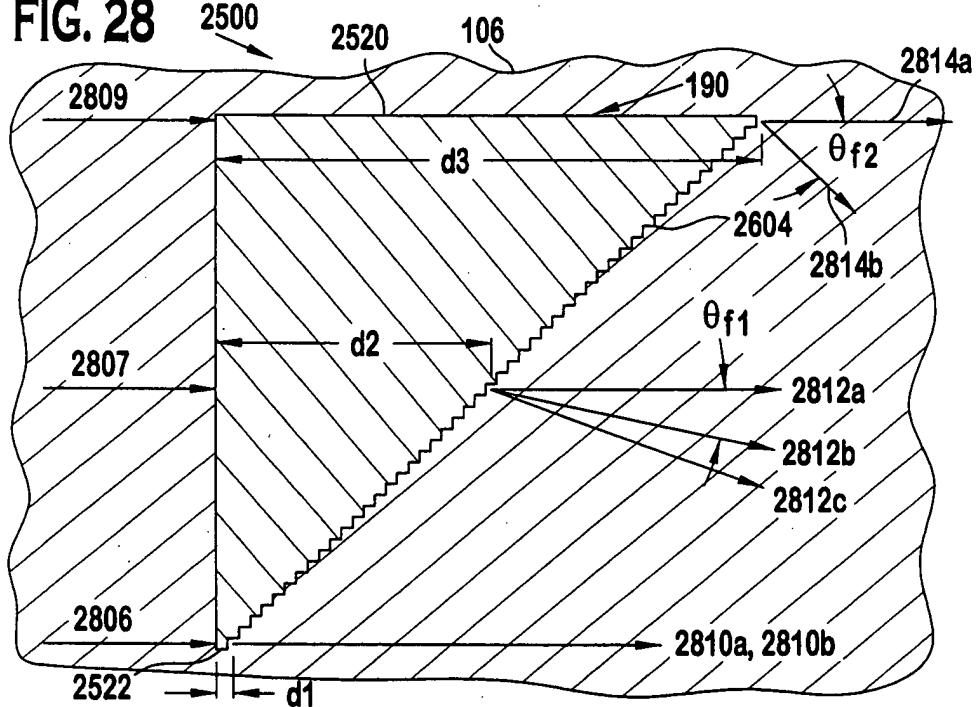


FIG. 29

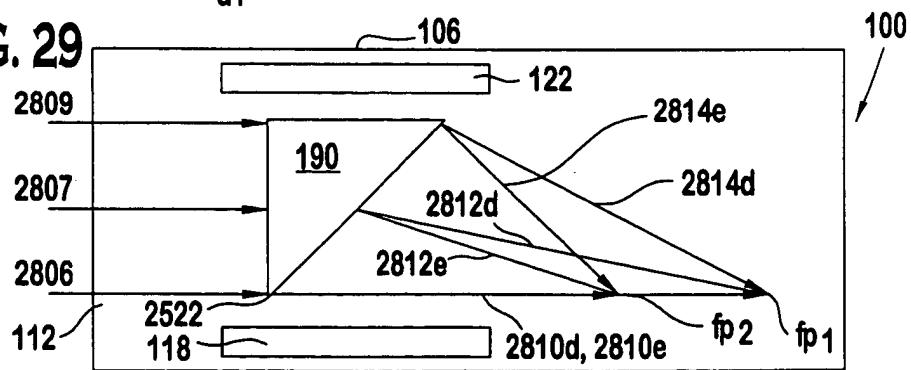


FIG. 30

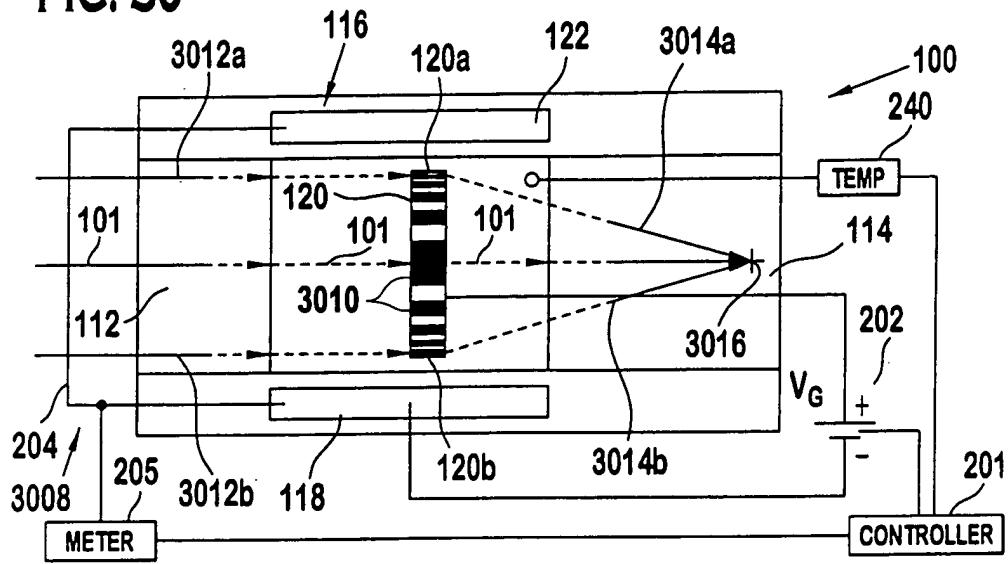
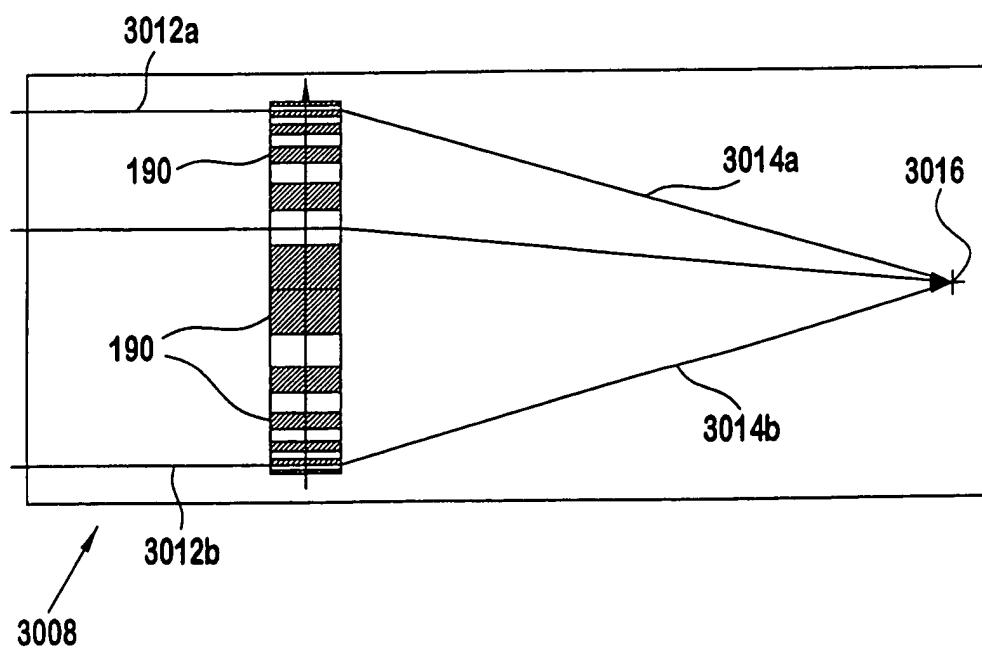


FIG. 30A



16/55

FIG. 31

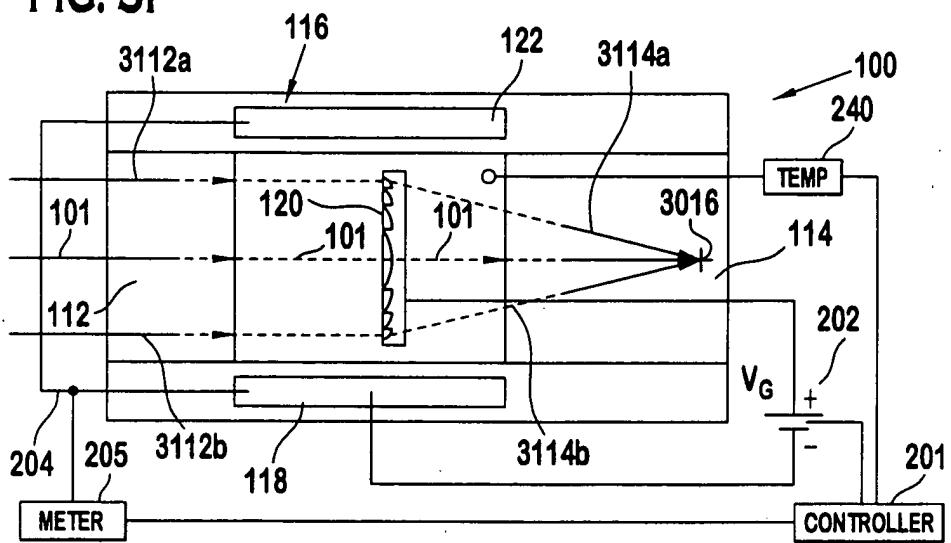
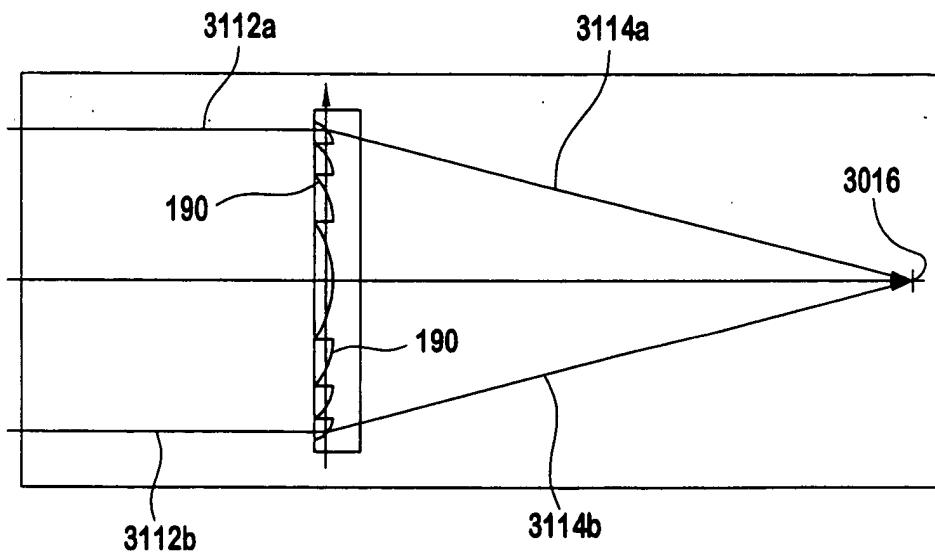


FIG. 31 A



17/55

FIG. 32

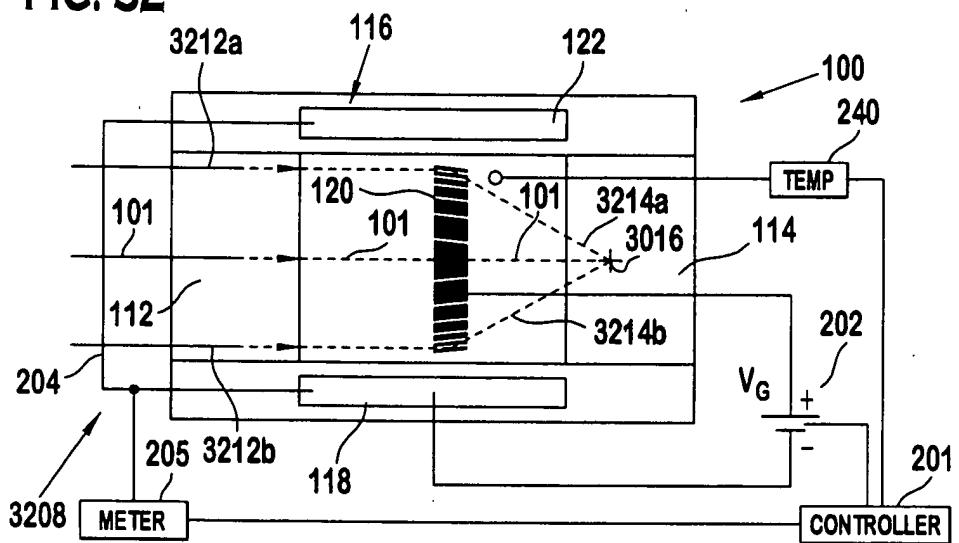
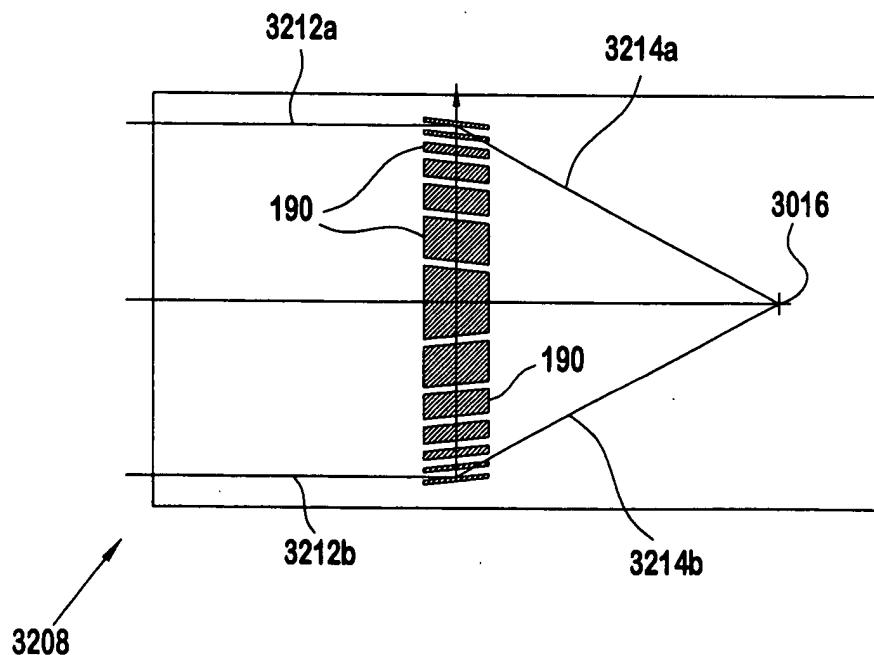


FIG. 32A



18/55

FIG. 33

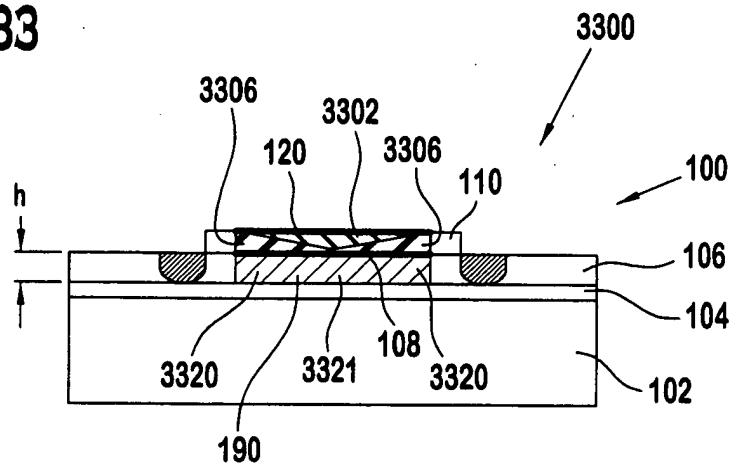
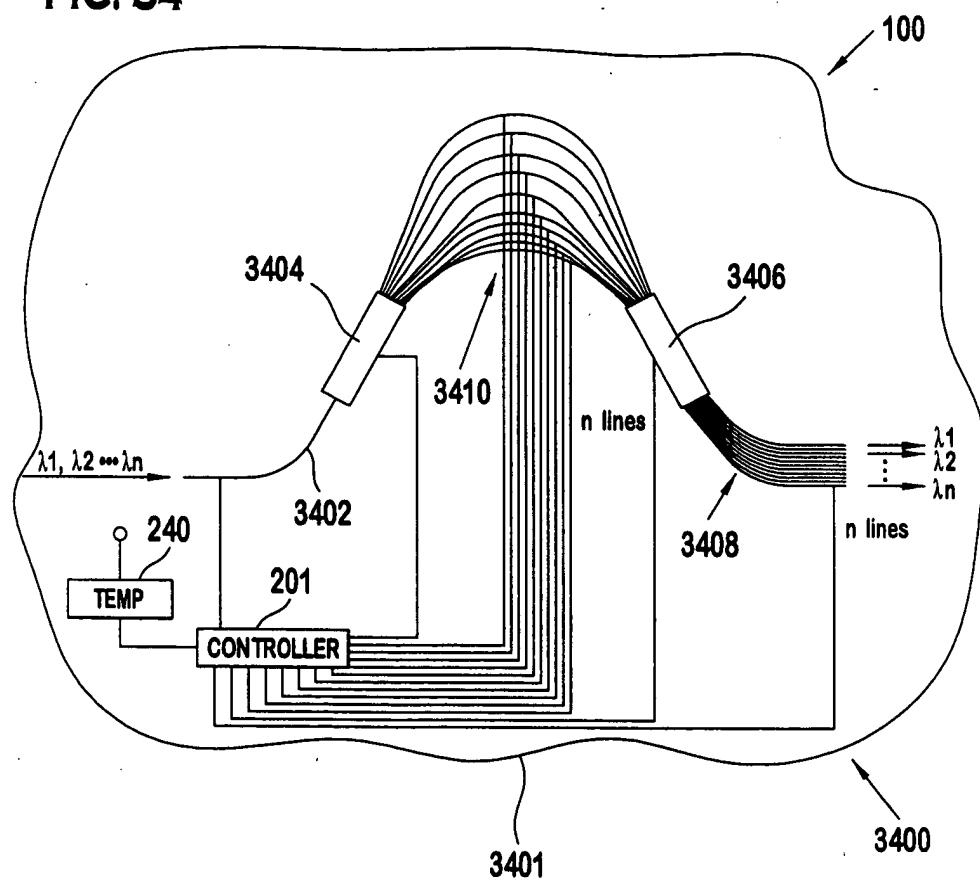


FIG. 34



19 / 55

FIG. 35

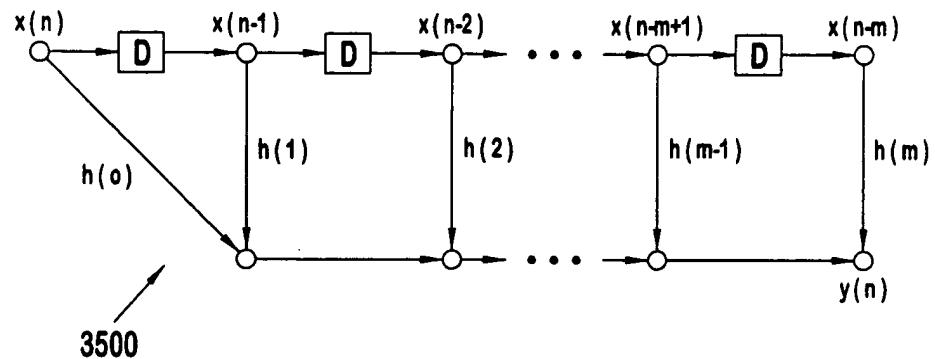
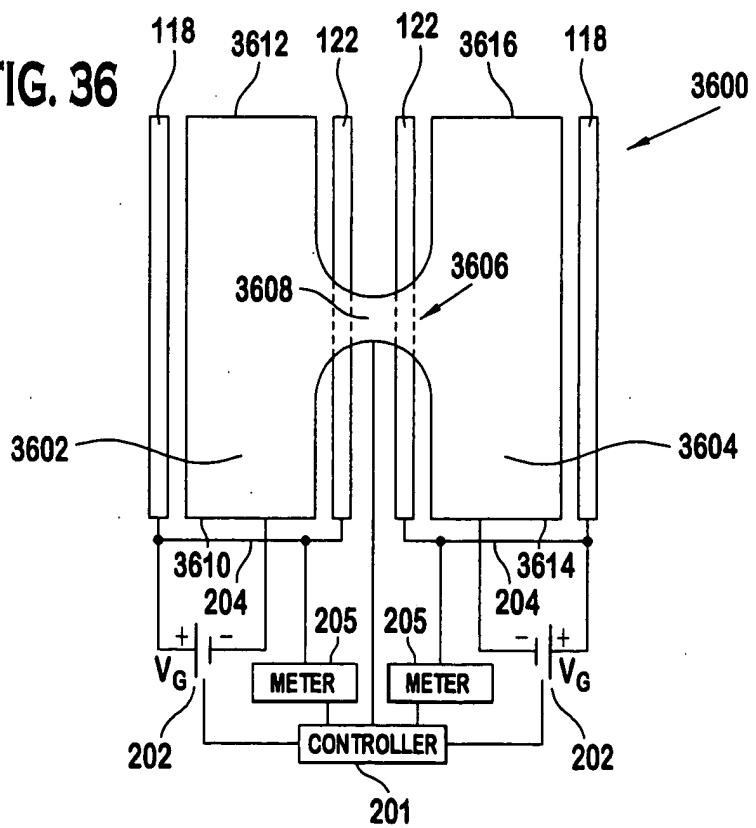


FIG. 36



20/55

FIG. 37

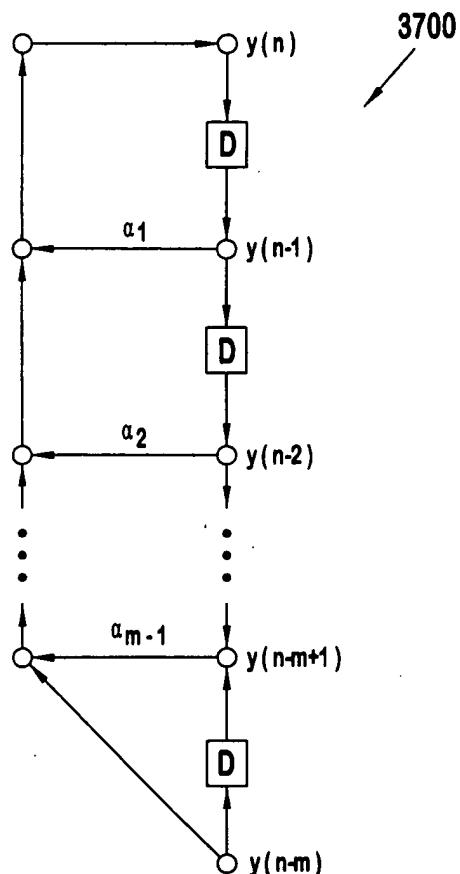


FIG. 38

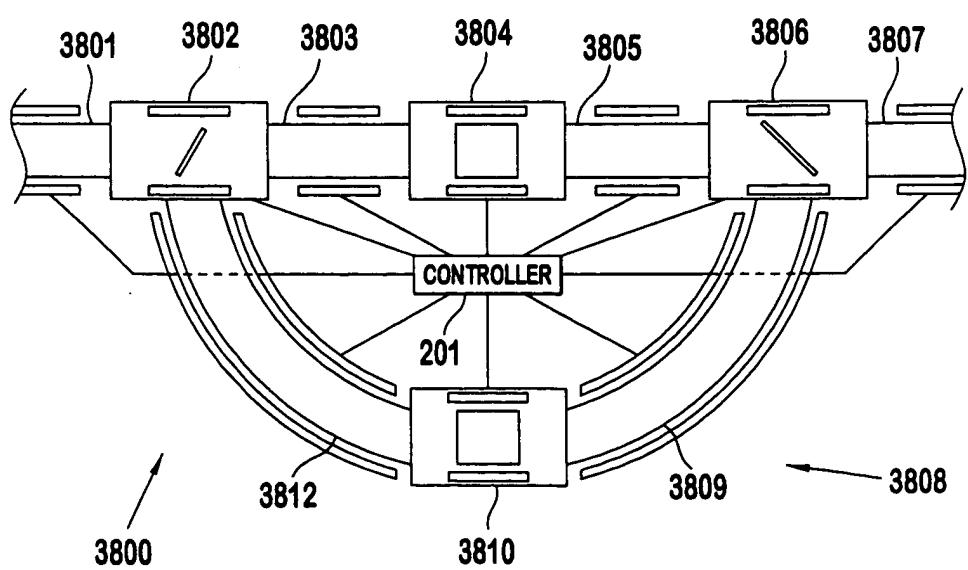


FIG. 39

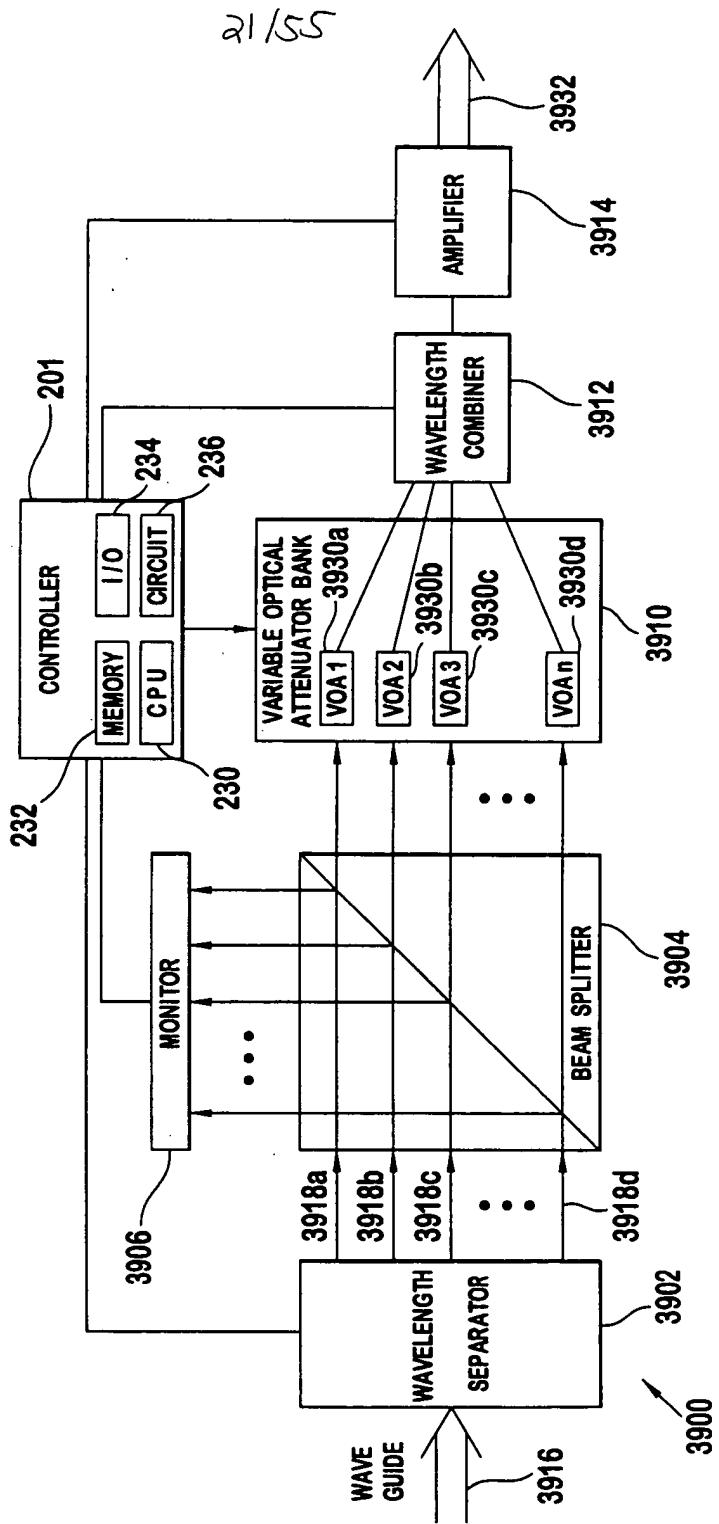
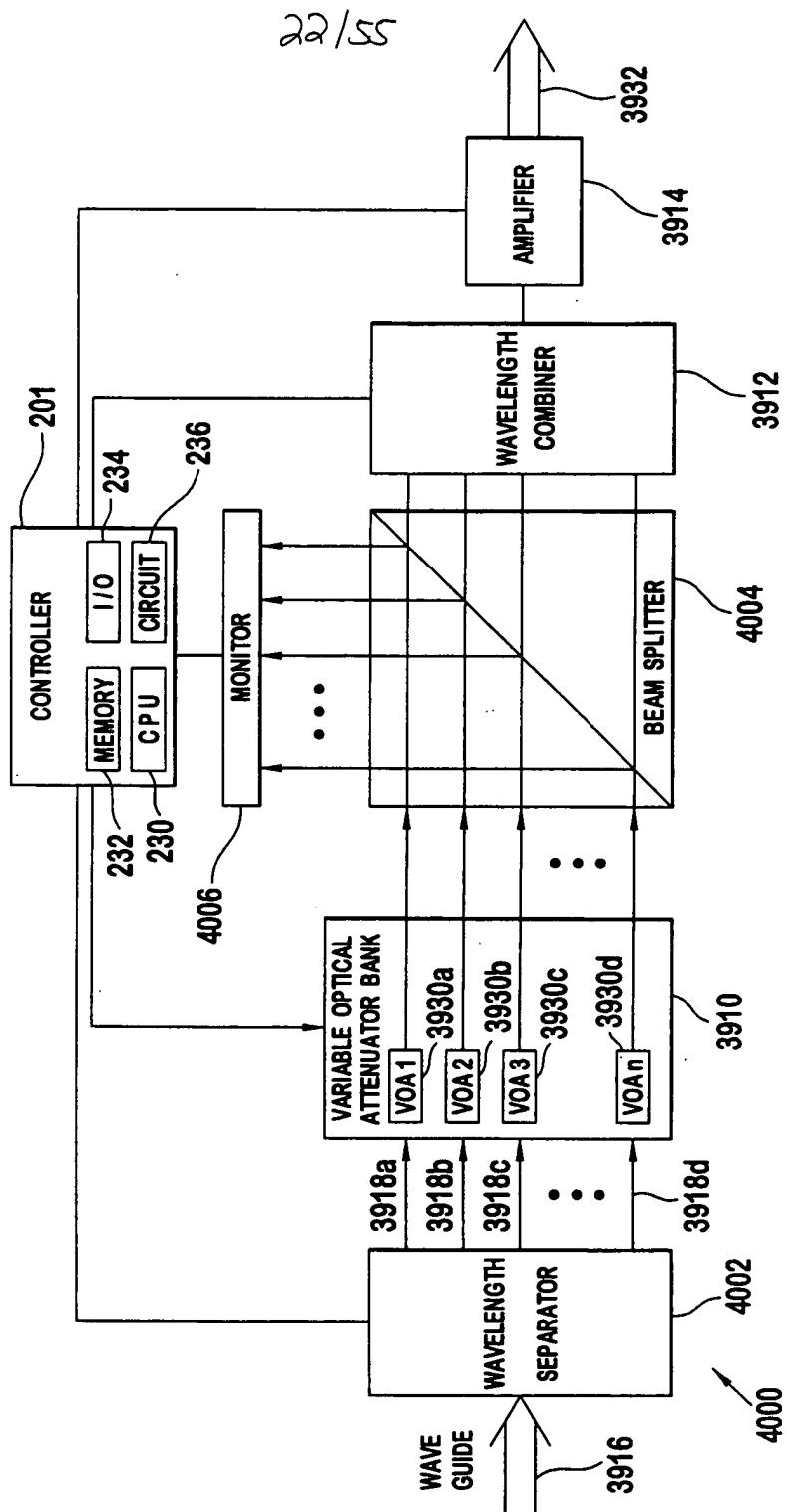


FIG. 40



23/55

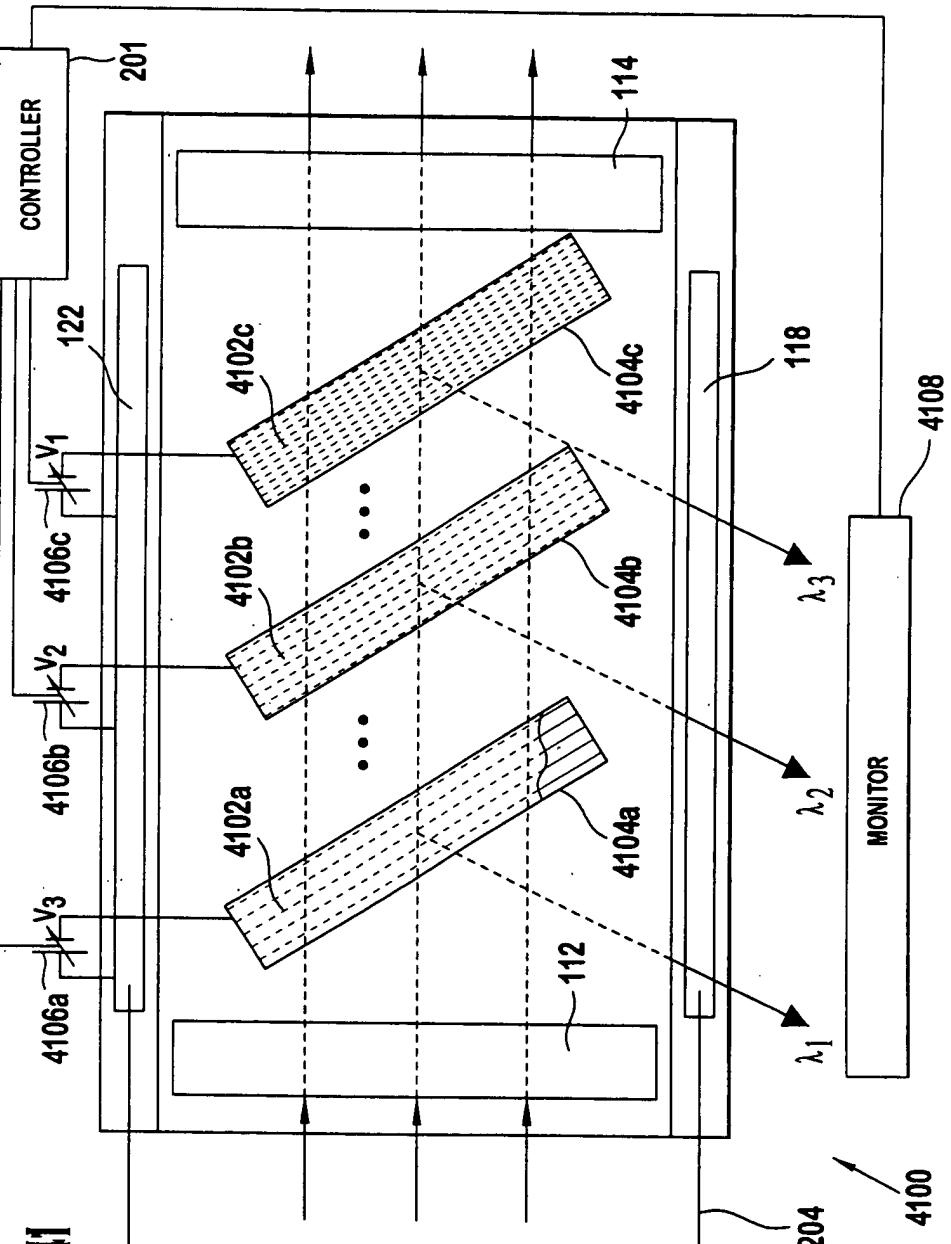


FIG. 41

24/55

FIG. 42

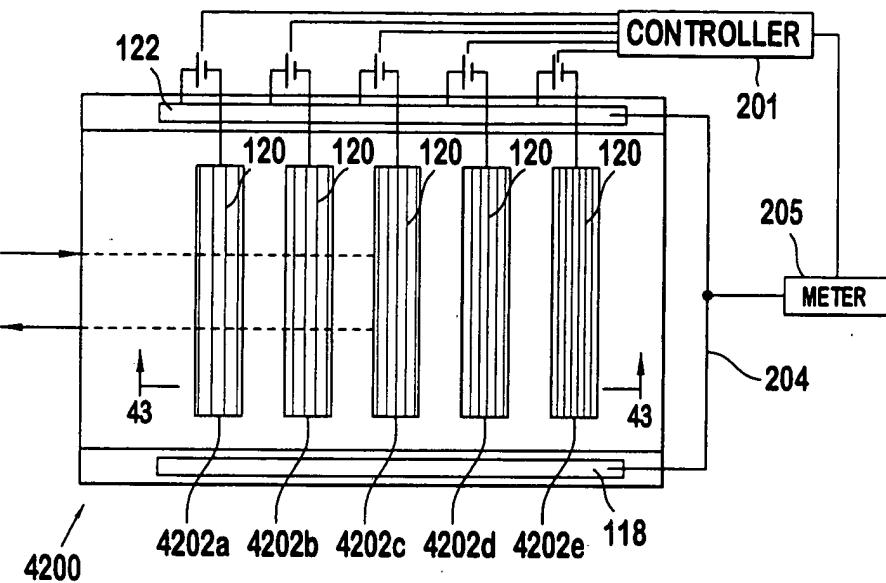
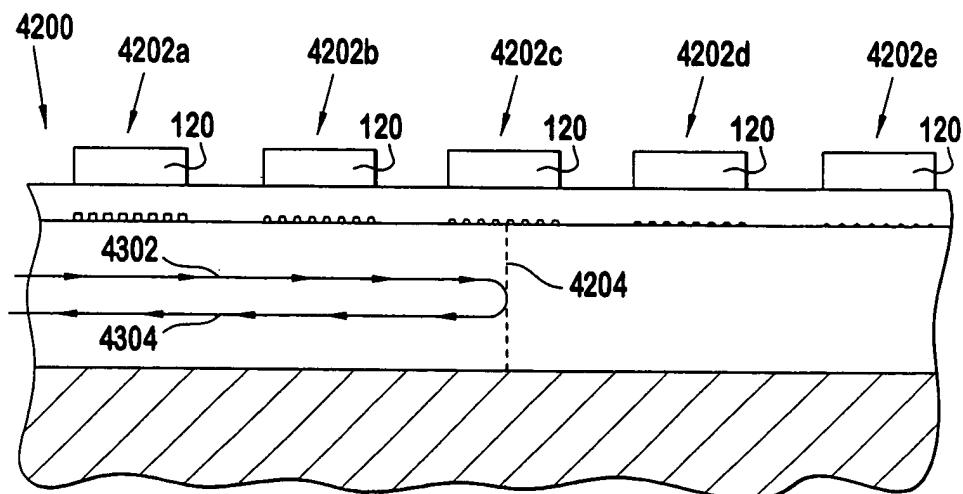


FIG. 43



25/55

FIG. 44

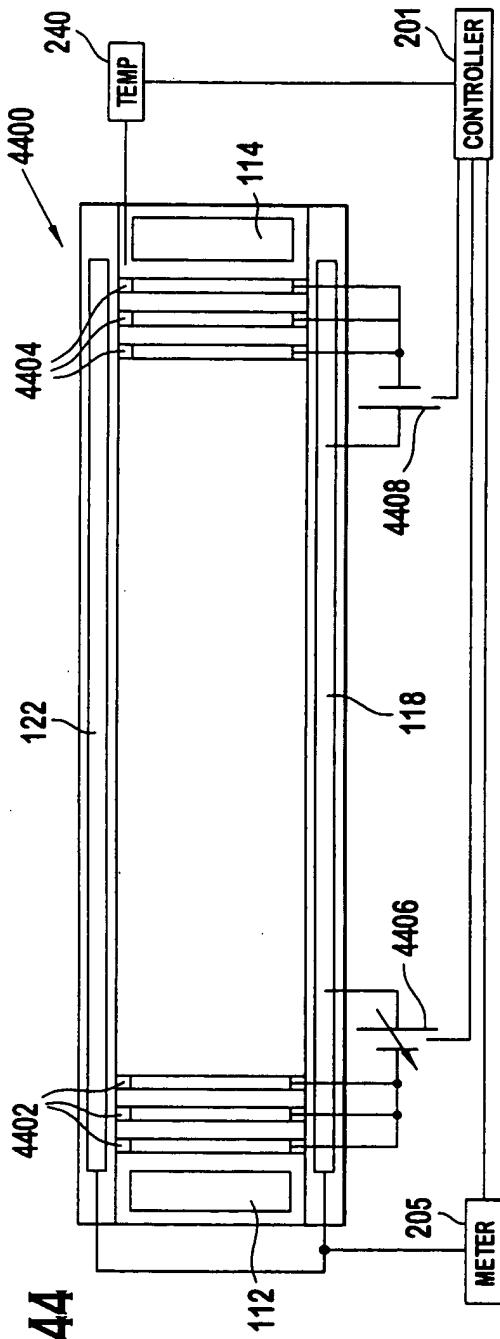
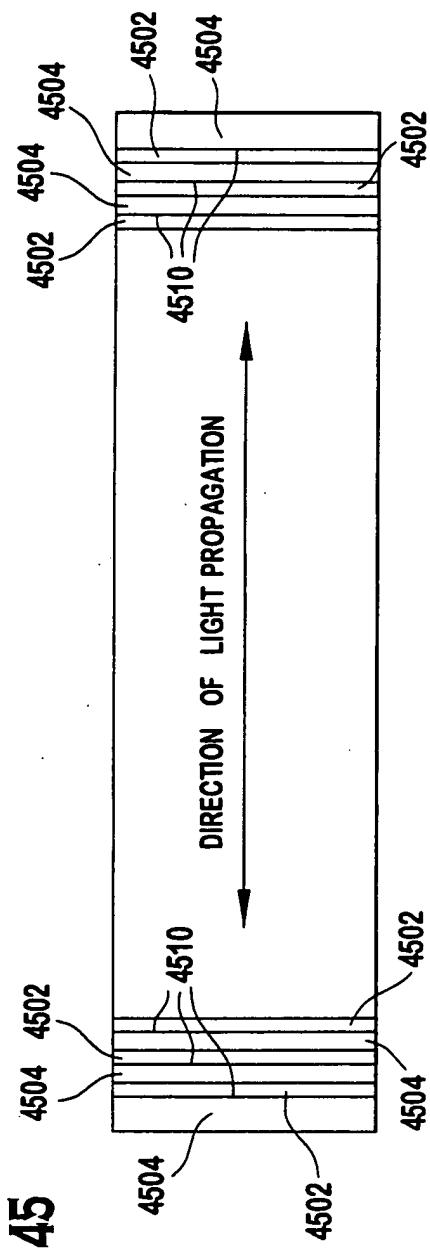


FIG. 45



26/55

FIG. 46

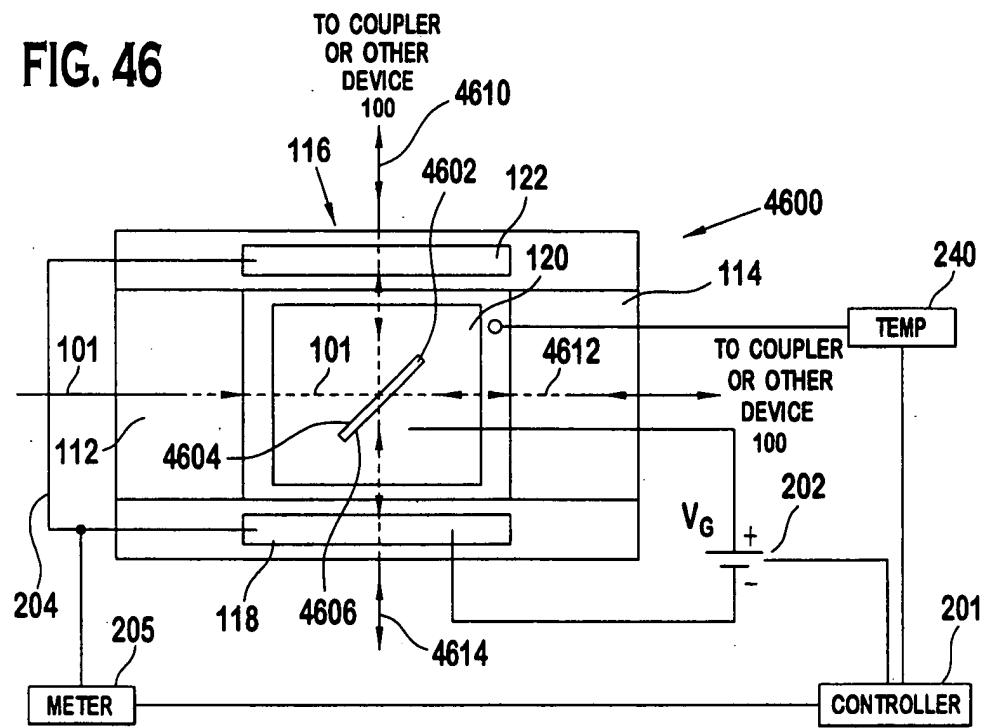
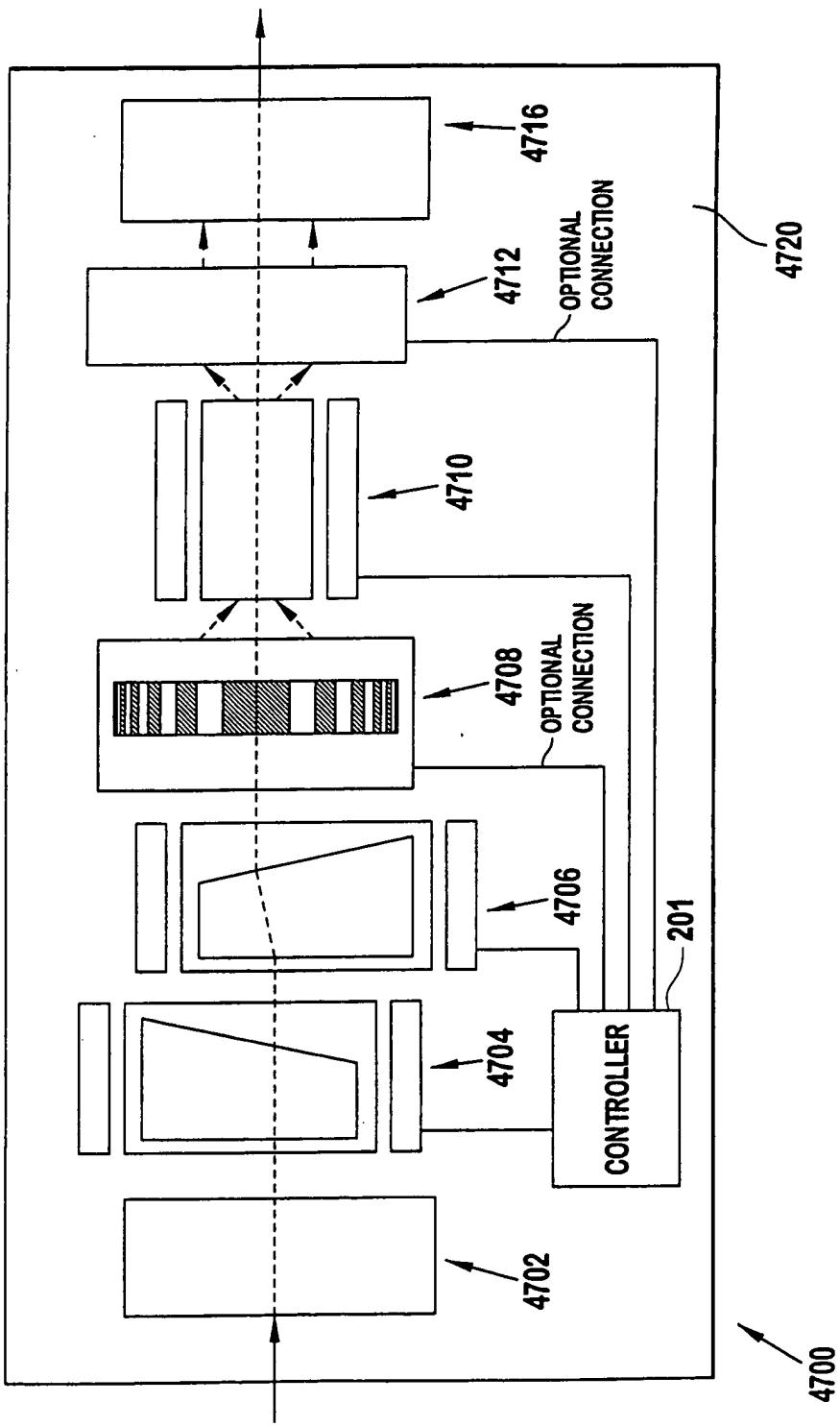


FIG. 47



28/55

FIG. 48

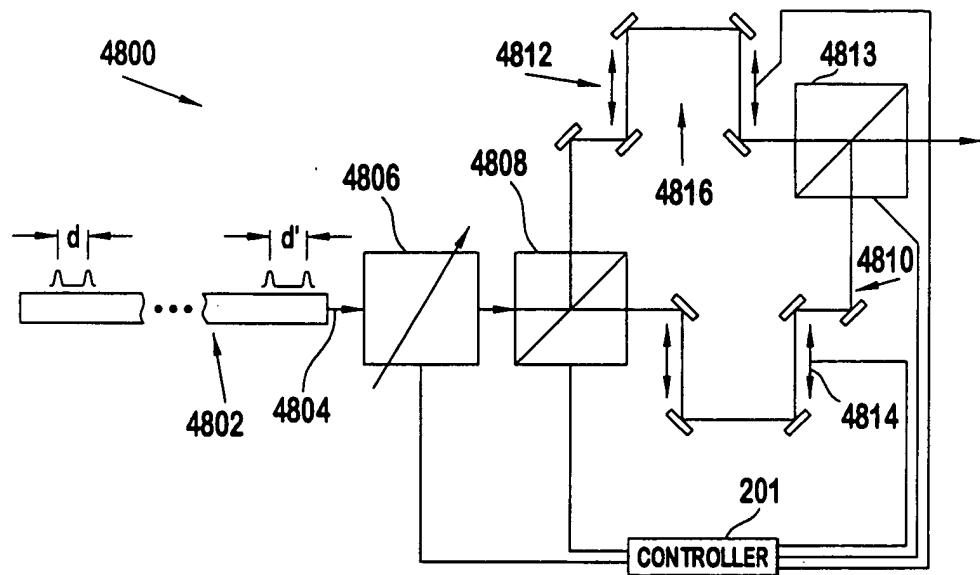
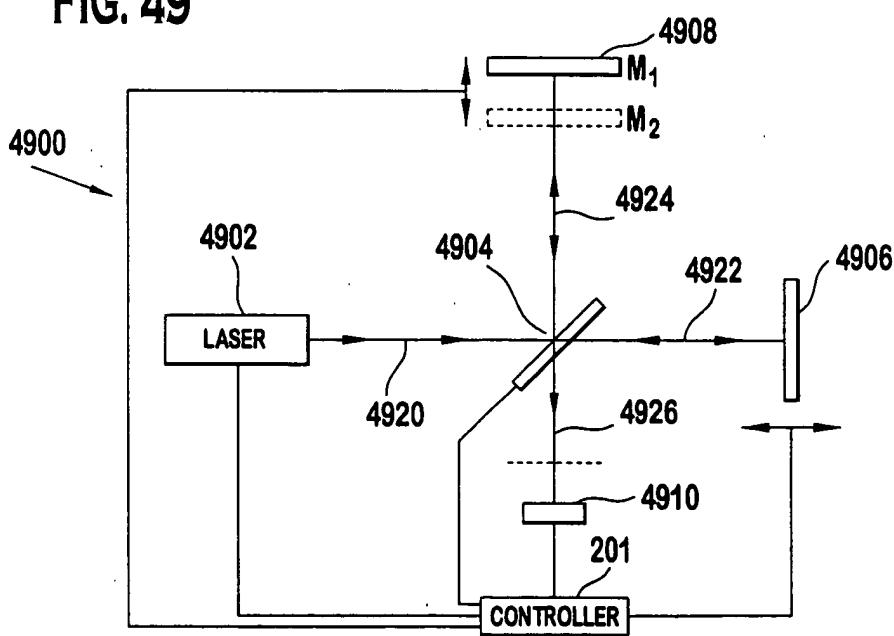


FIG. 49



29/55

FIG. 50

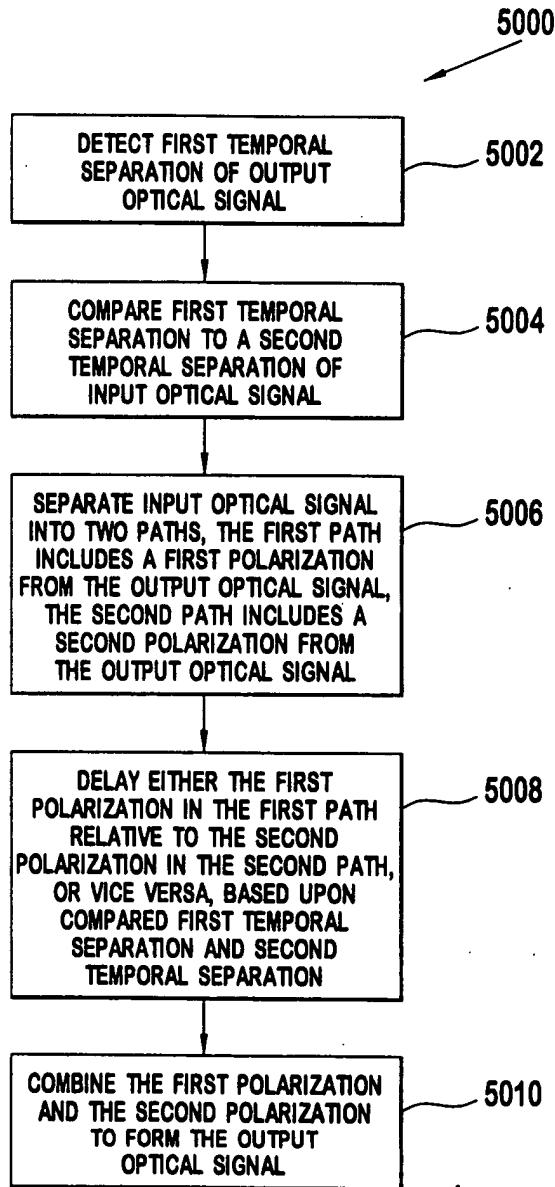
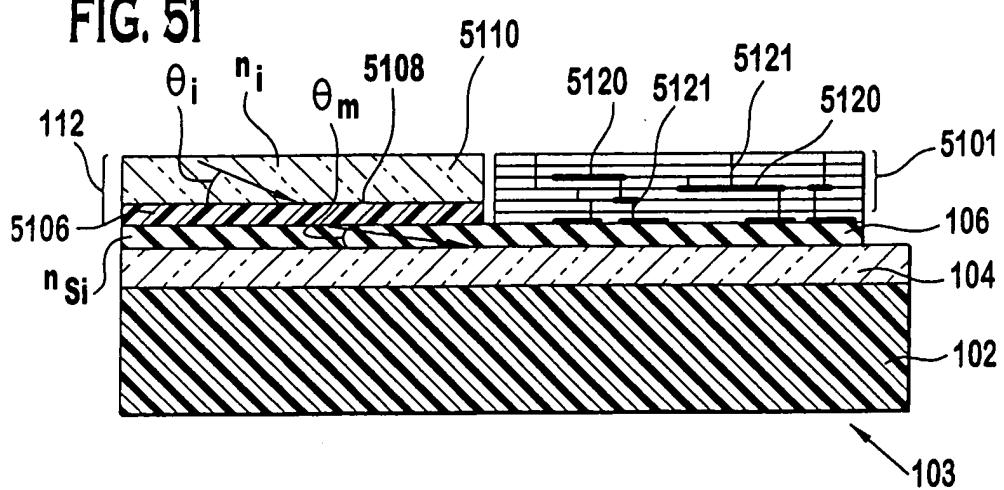
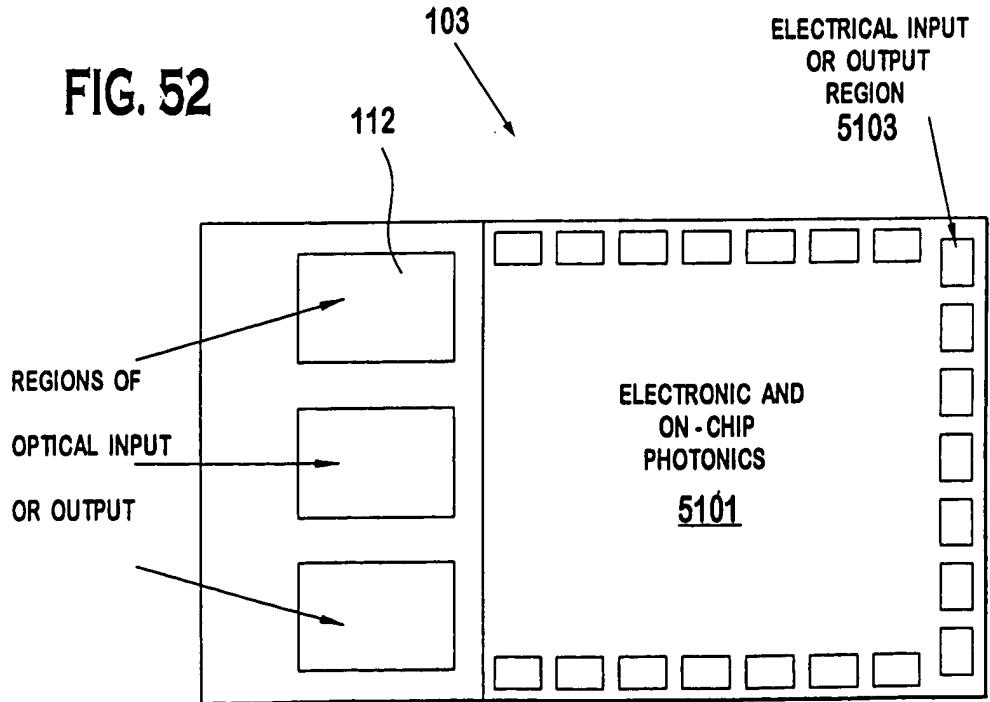


FIG. 51**FIG. 52**

31/55

FIG. 53

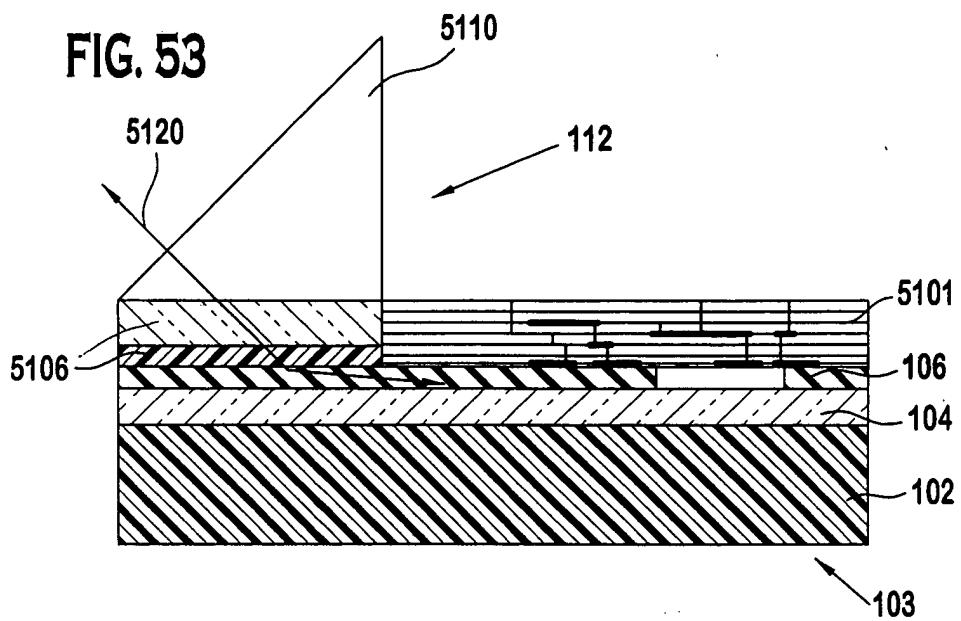
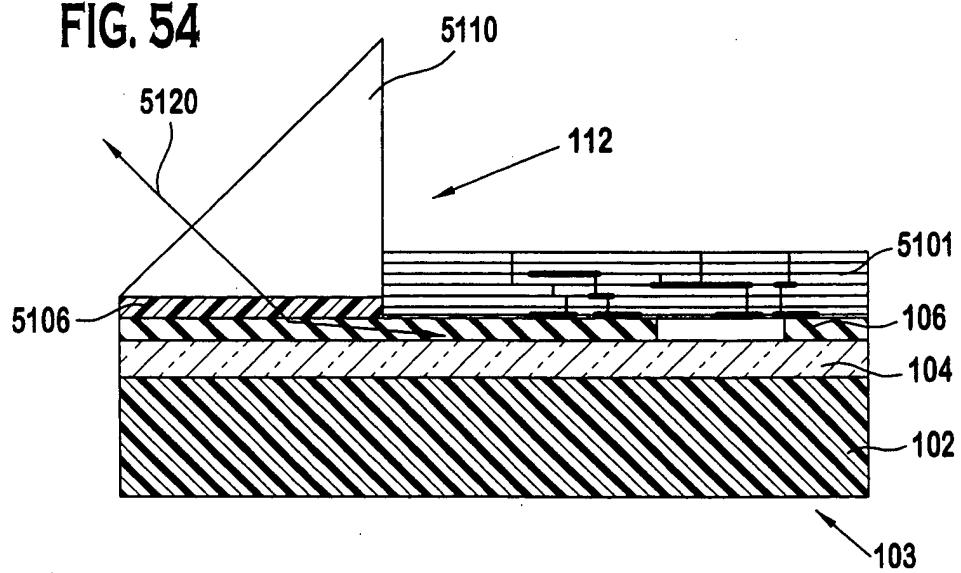


FIG. 54



32 / 55

FIG. 55

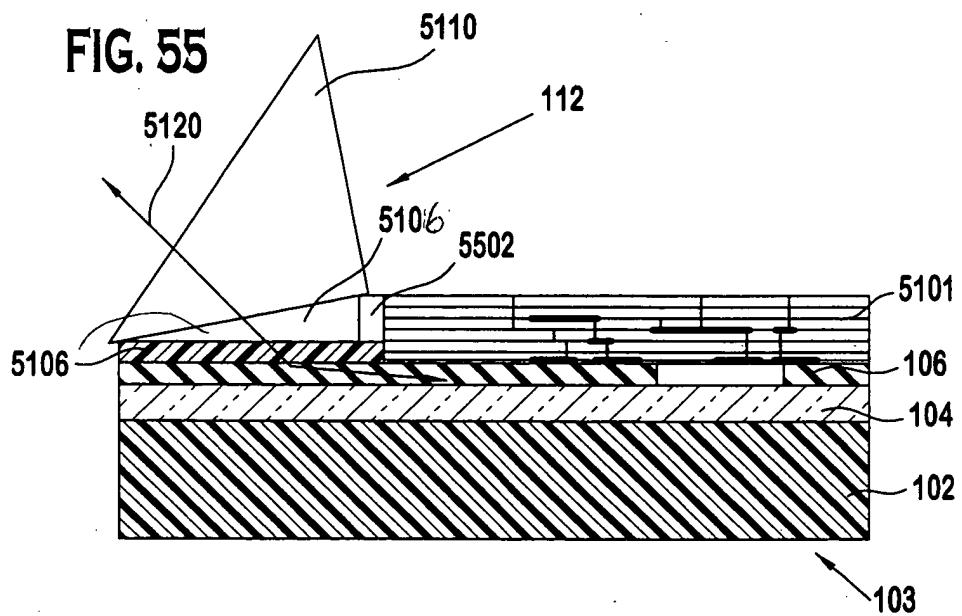
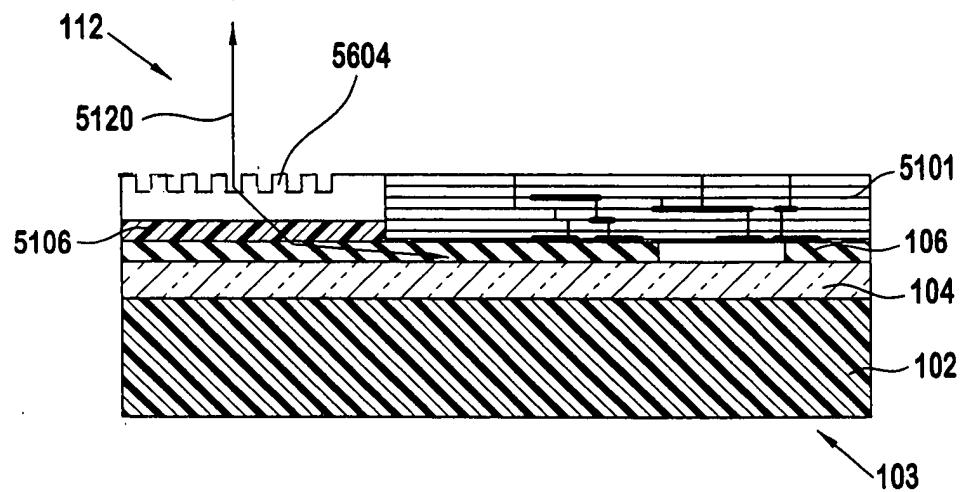


FIG. 56



33/55

FIG. 57

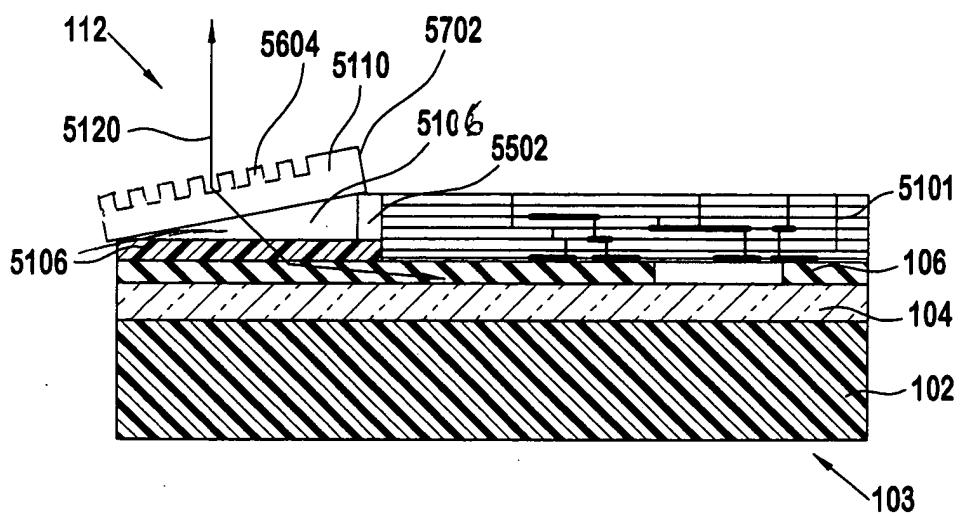
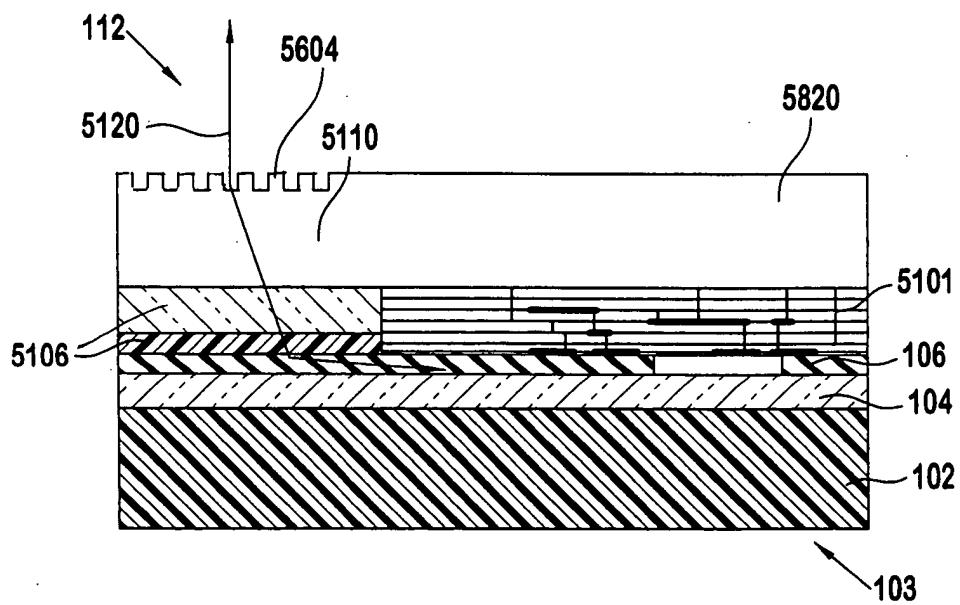


FIG. 58



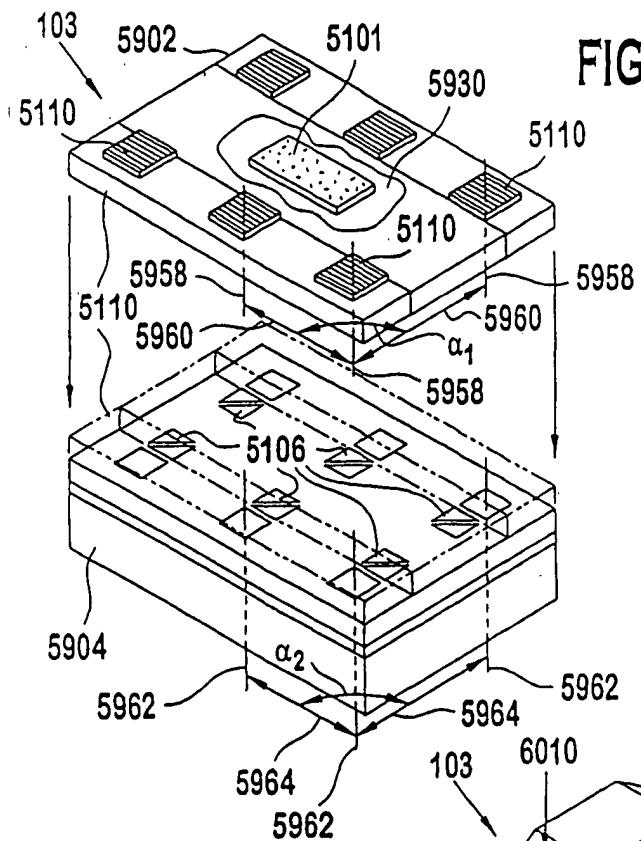


FIG. 59

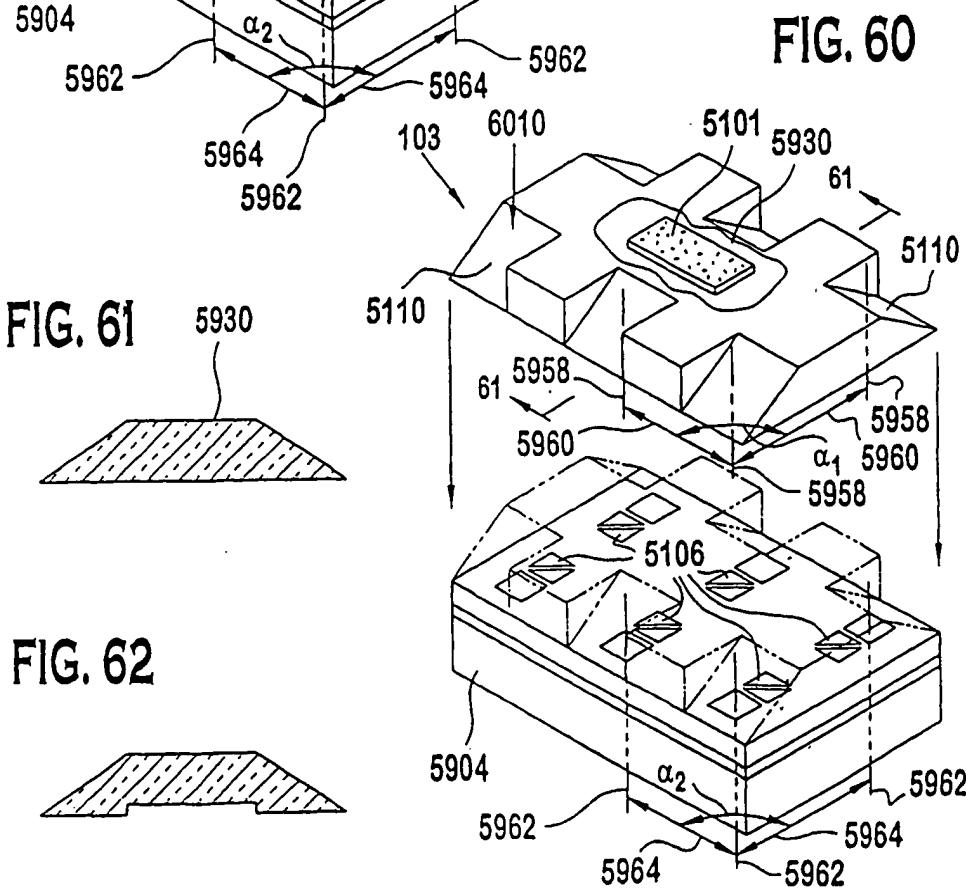


FIG. 60

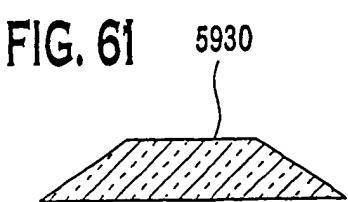


FIG. 62

35/55

FIG. 63A

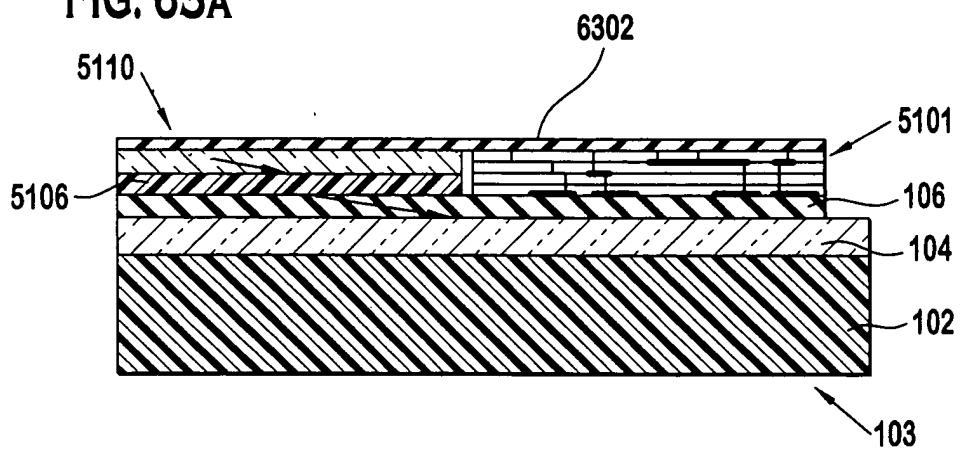
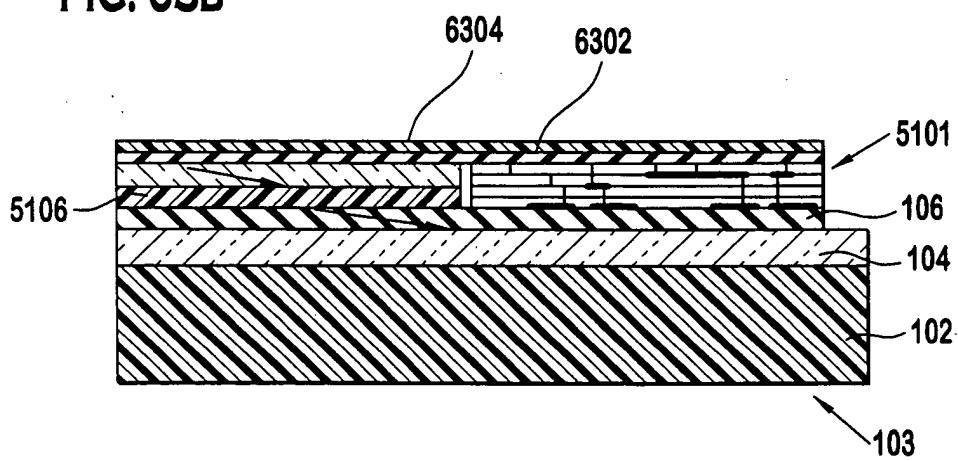


FIG. 63B



36/55

FIG. 63C

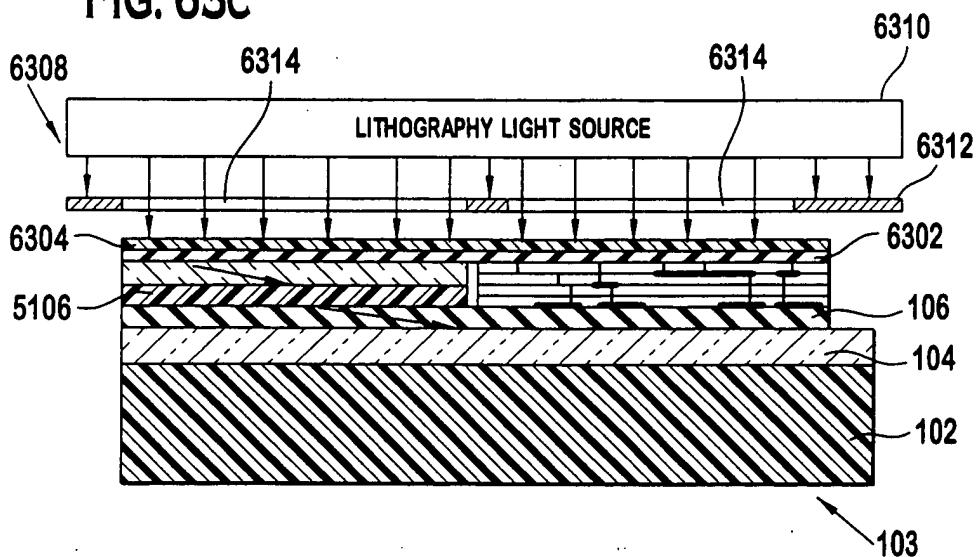
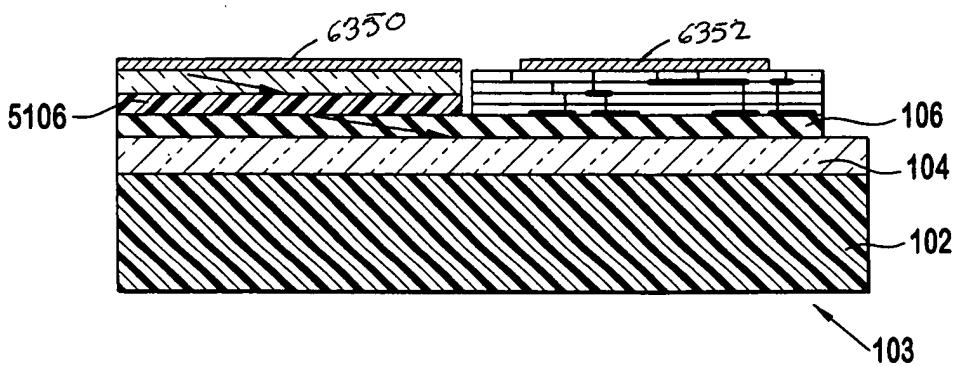


FIG. 63D



37/55

FIG. 64

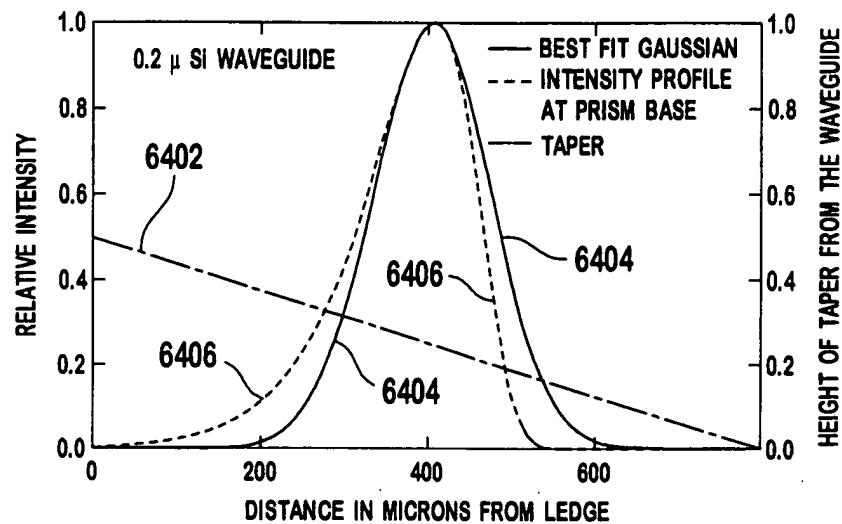
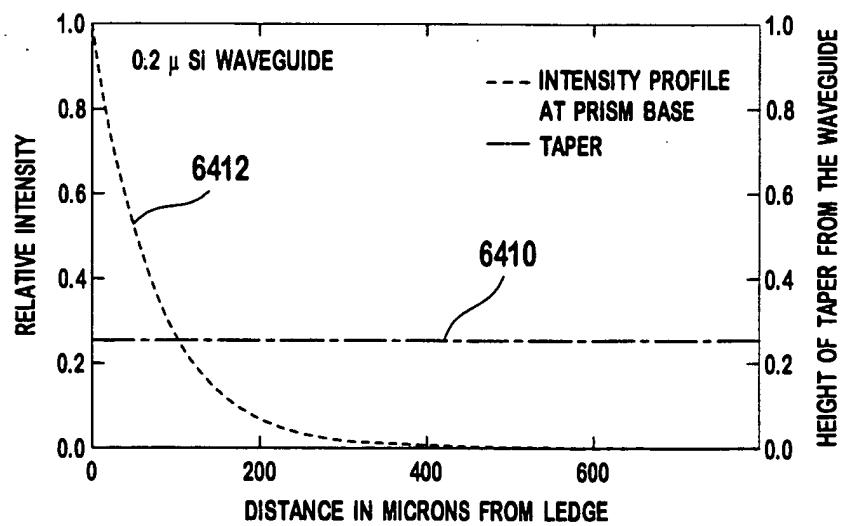


FIG. 65



38/55

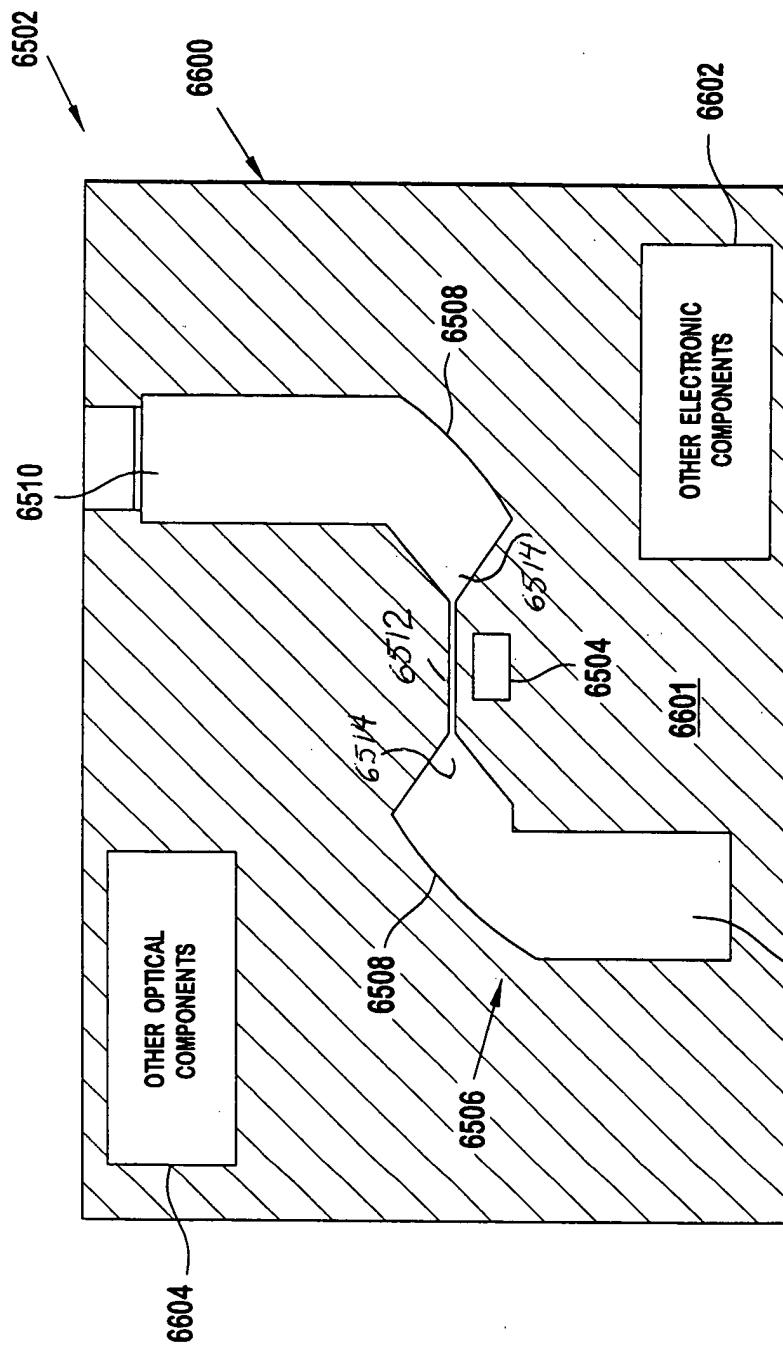
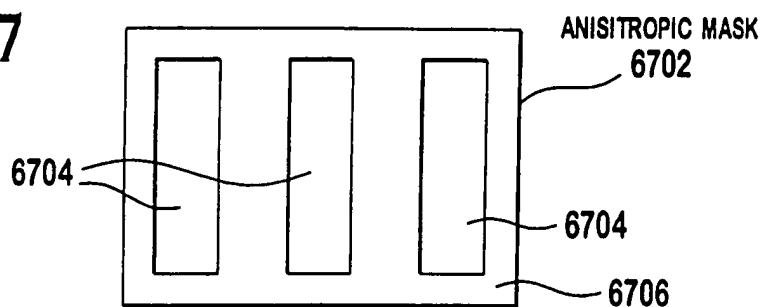
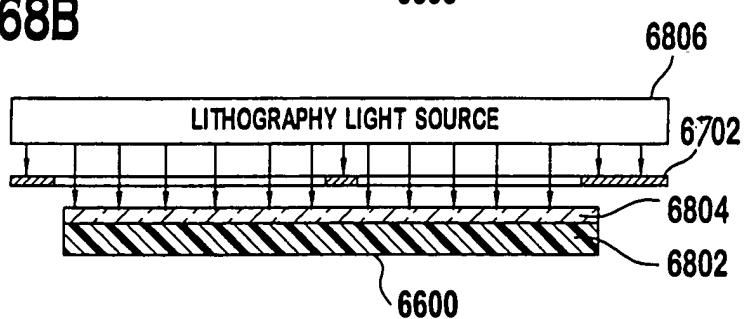
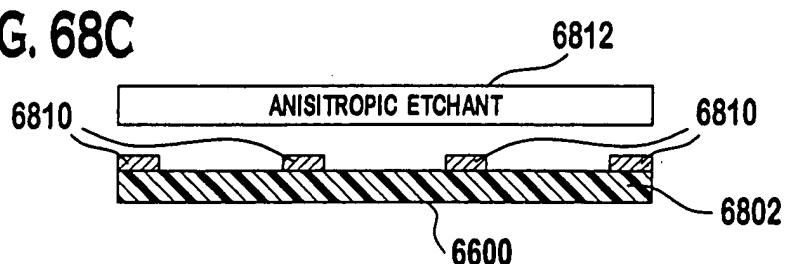
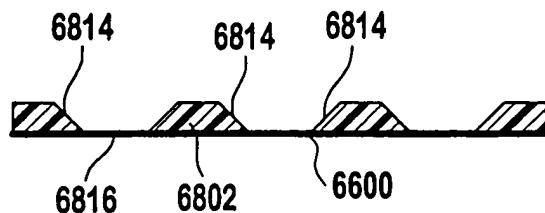
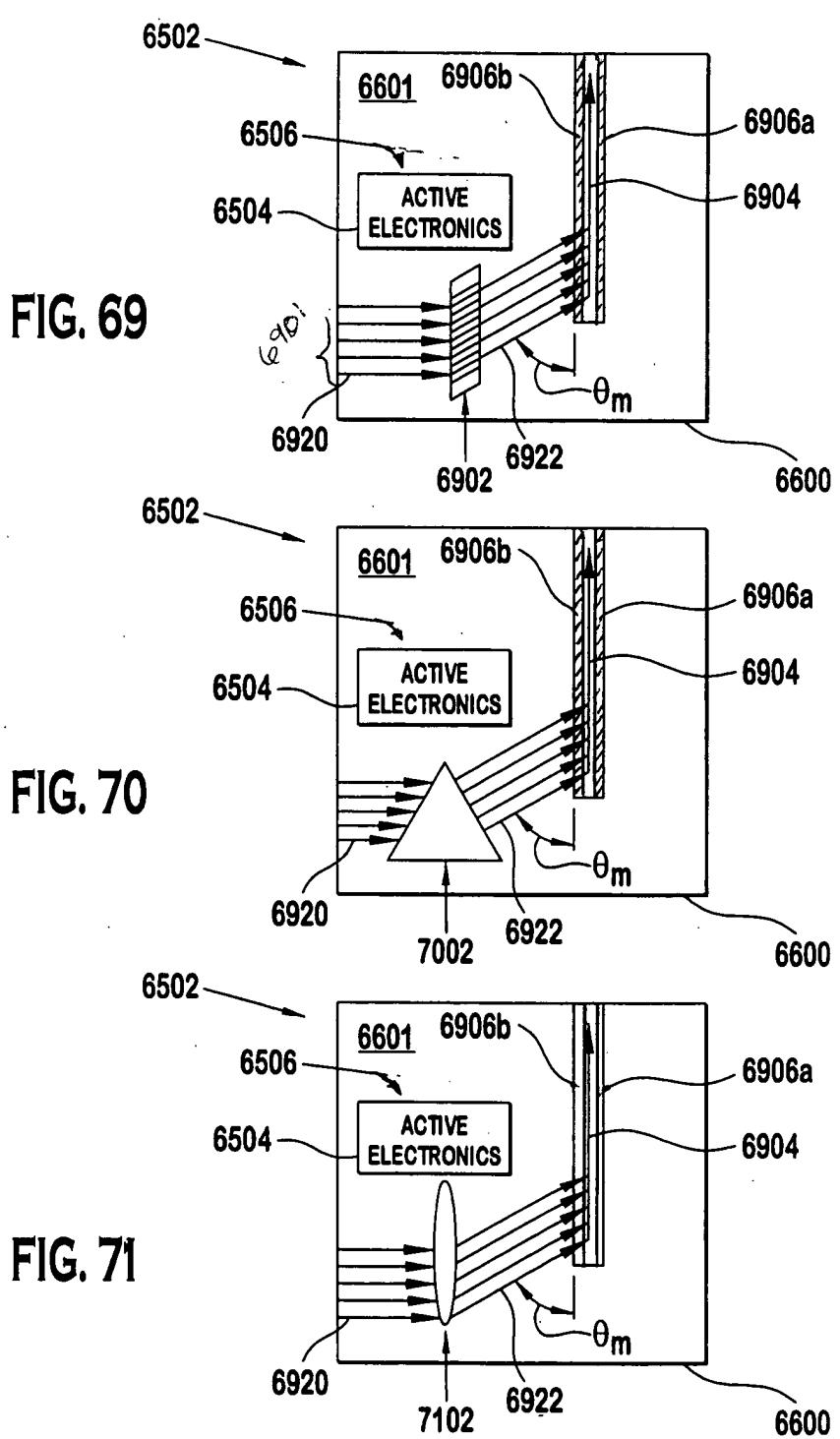


FIG. 66
6507

FIG. 67**FIG. 68A****FIG. 68B****FIG. 68C****FIG. 68D**

40/55



41/55

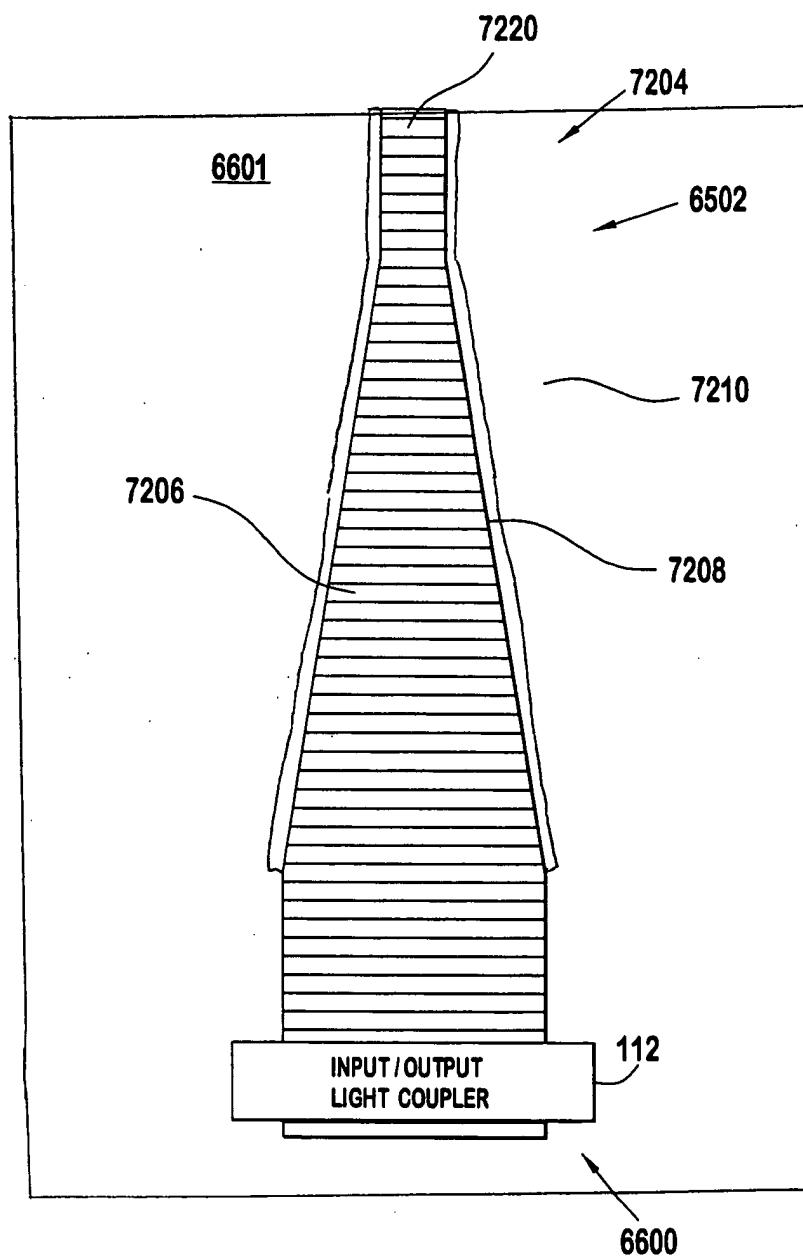


FIG. 72

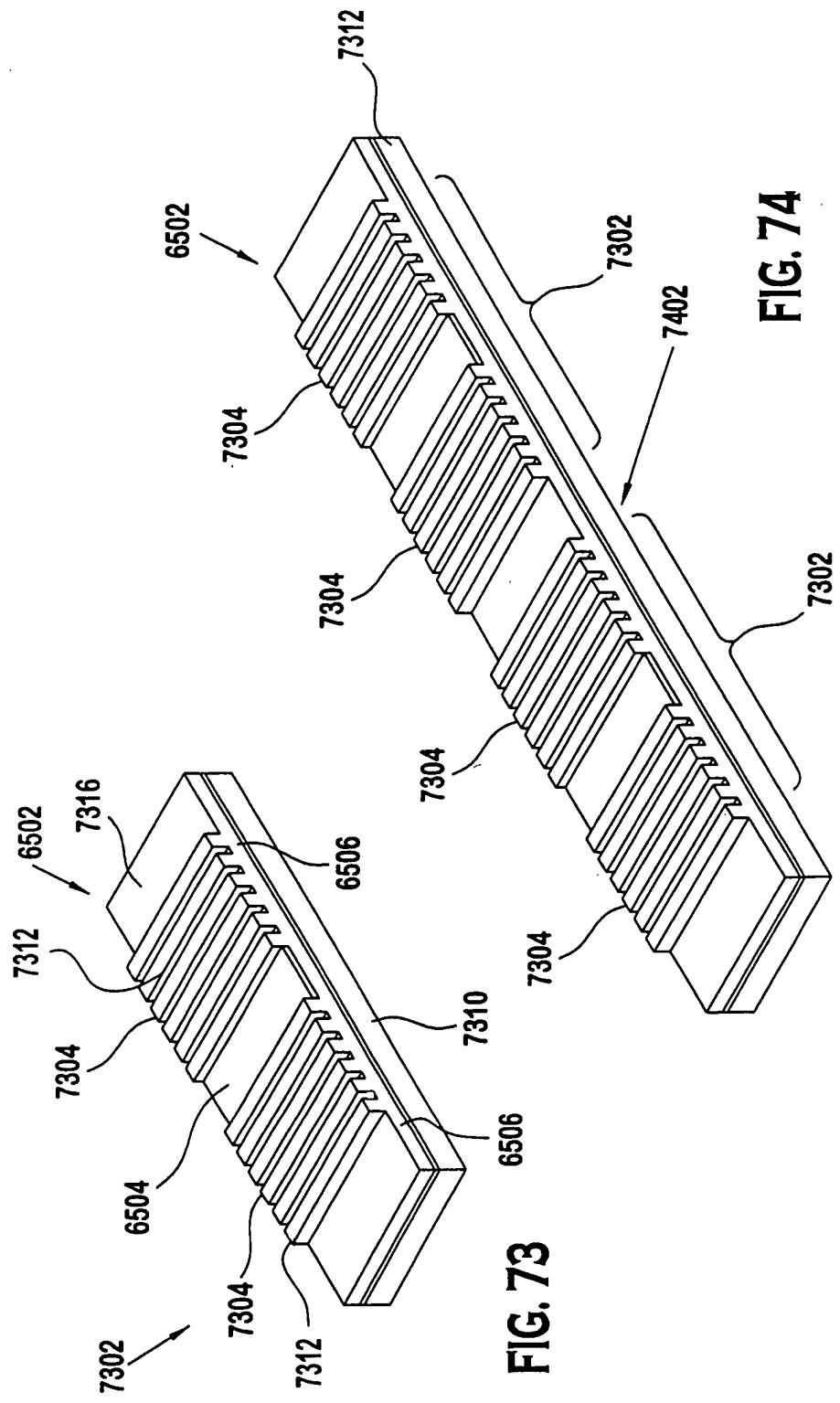
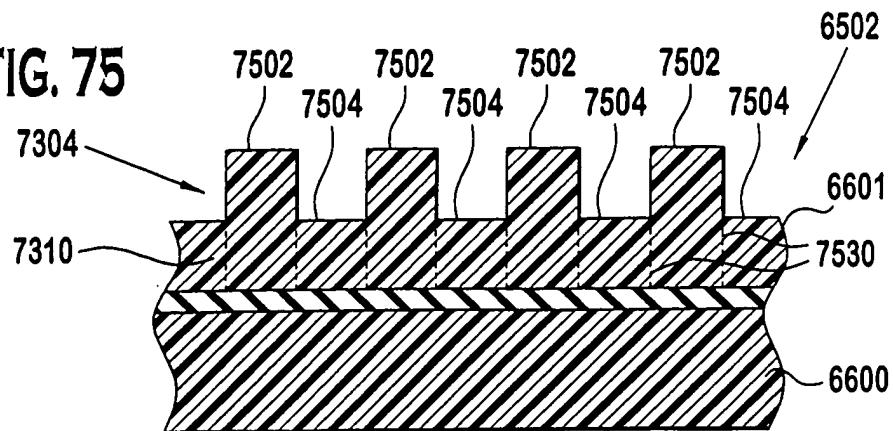
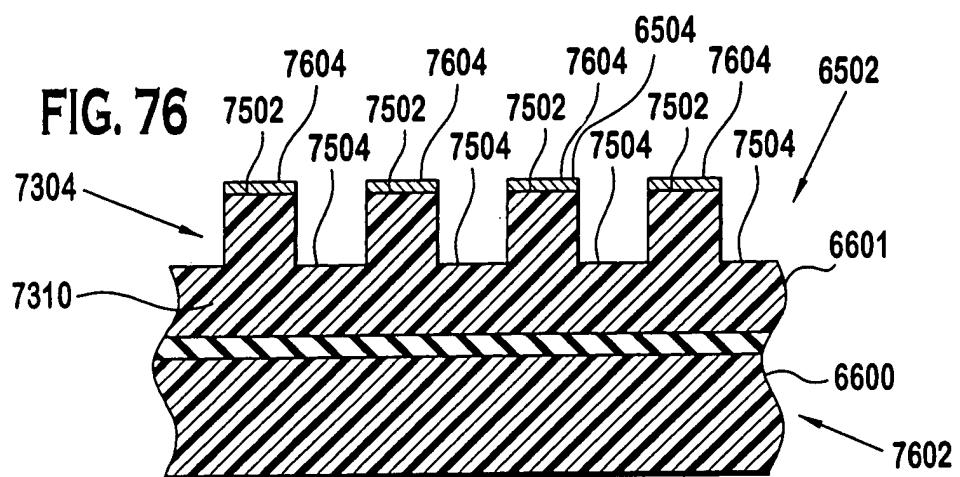
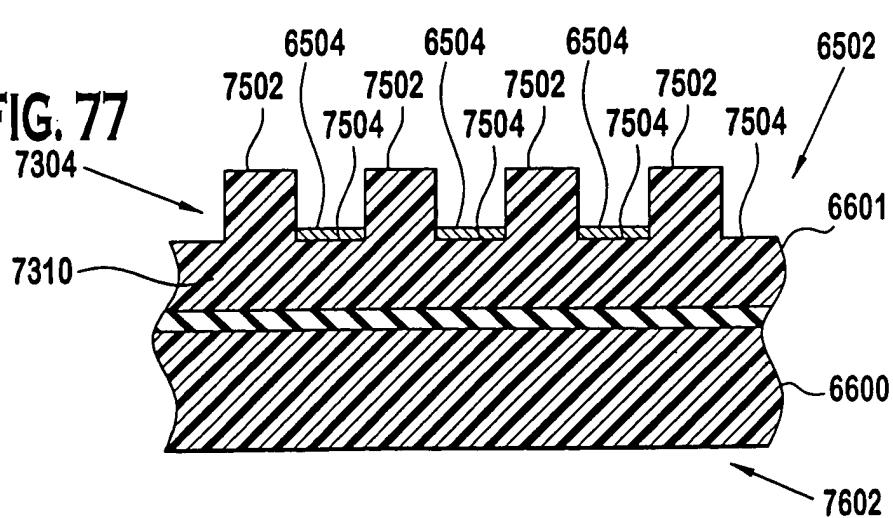


FIG. 75**FIG. 76****FIG. 77**

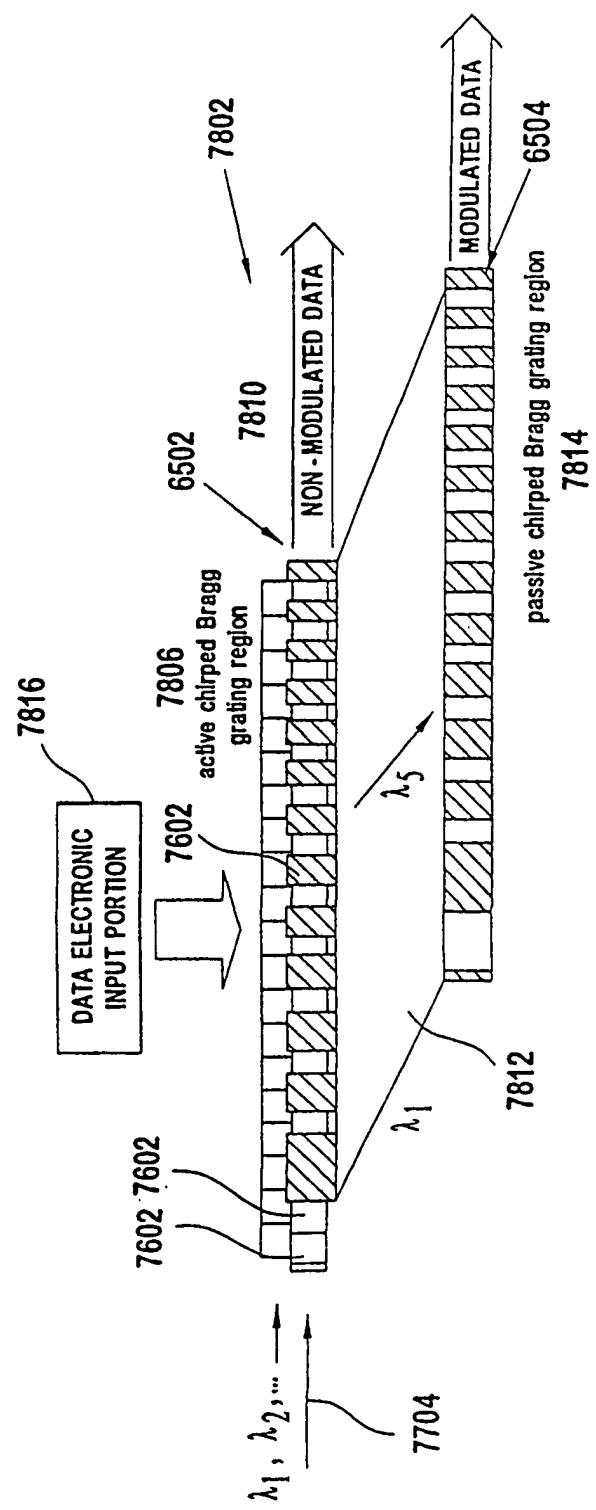


FIG. 78

45/55

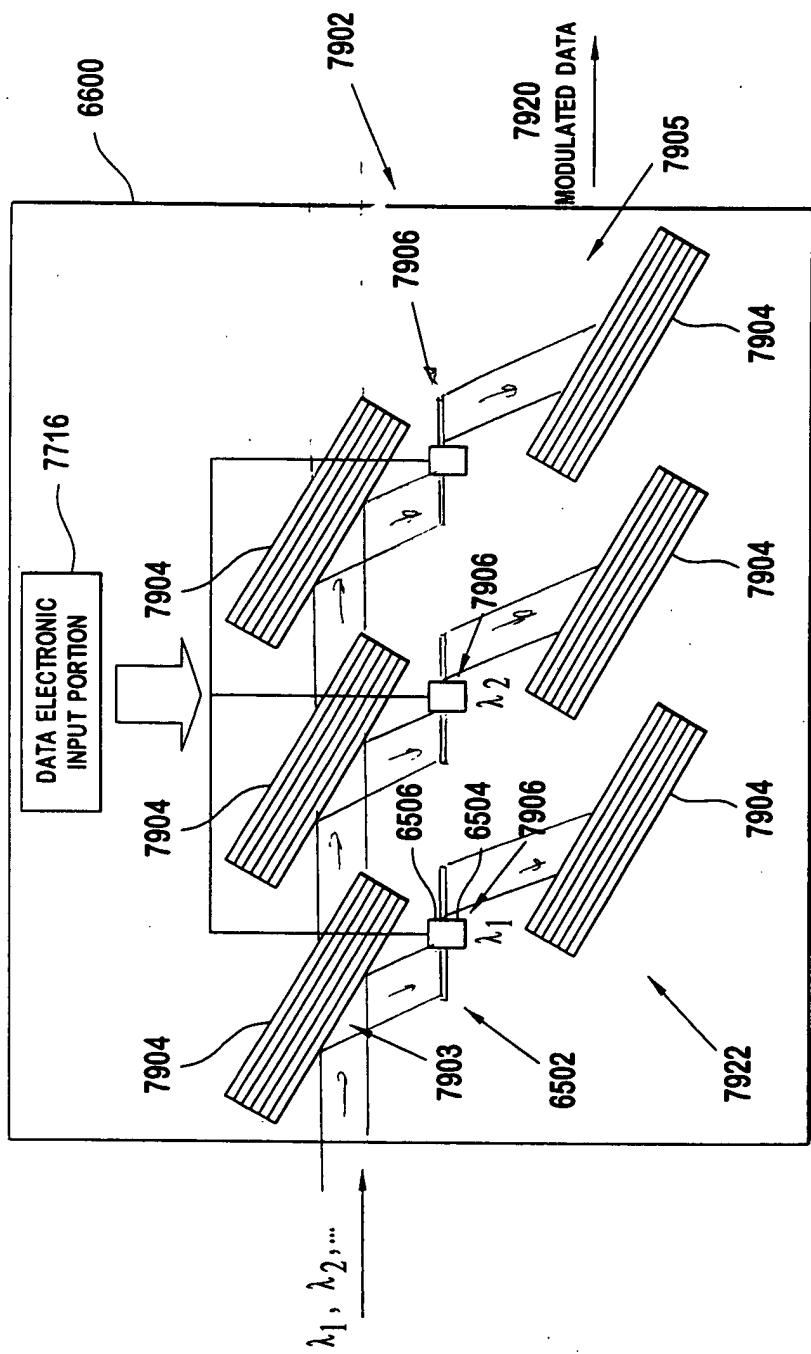


FIG. 79

46/55

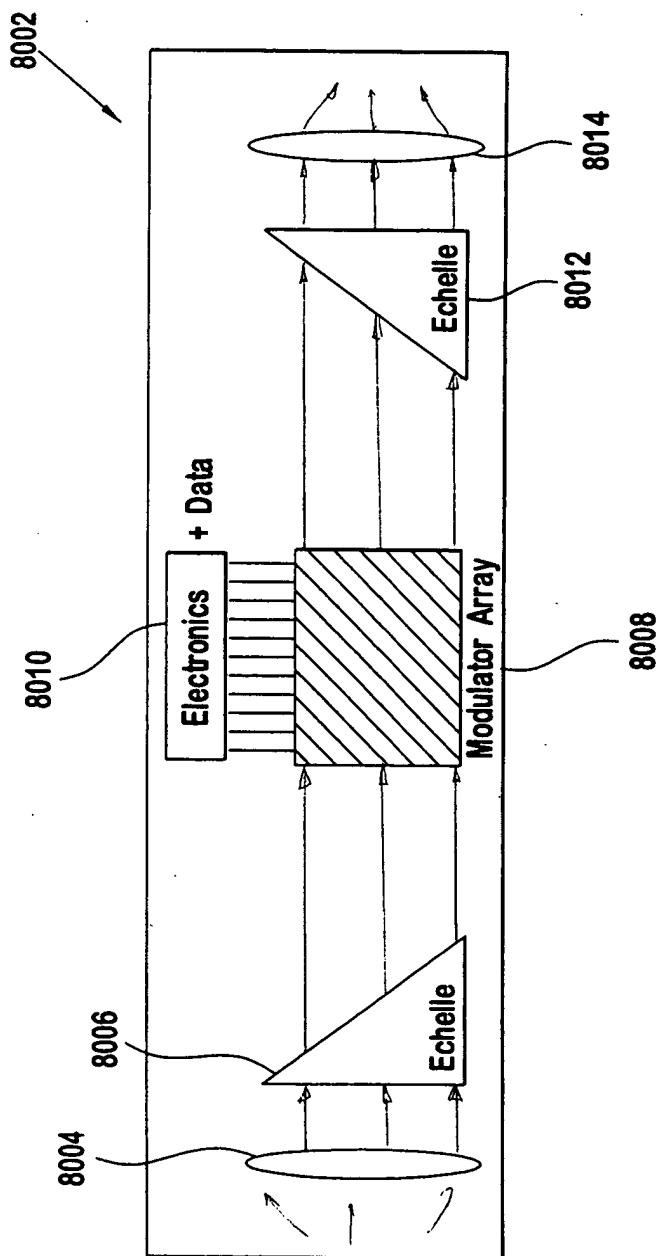


FIG. 80

47/55

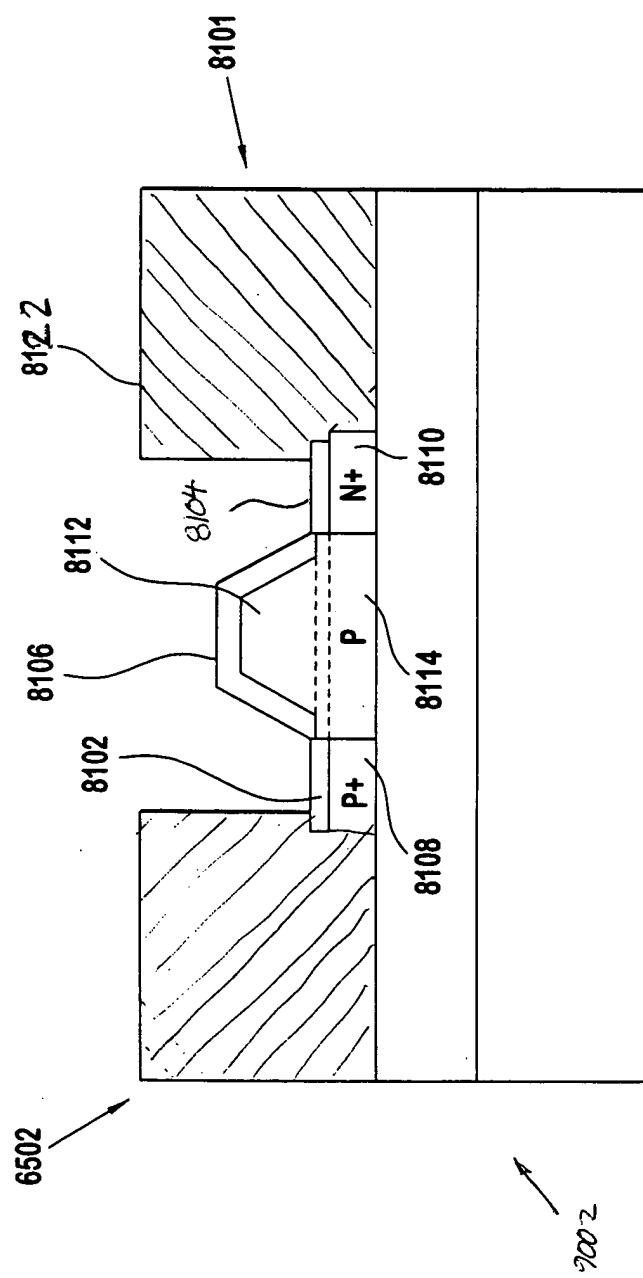
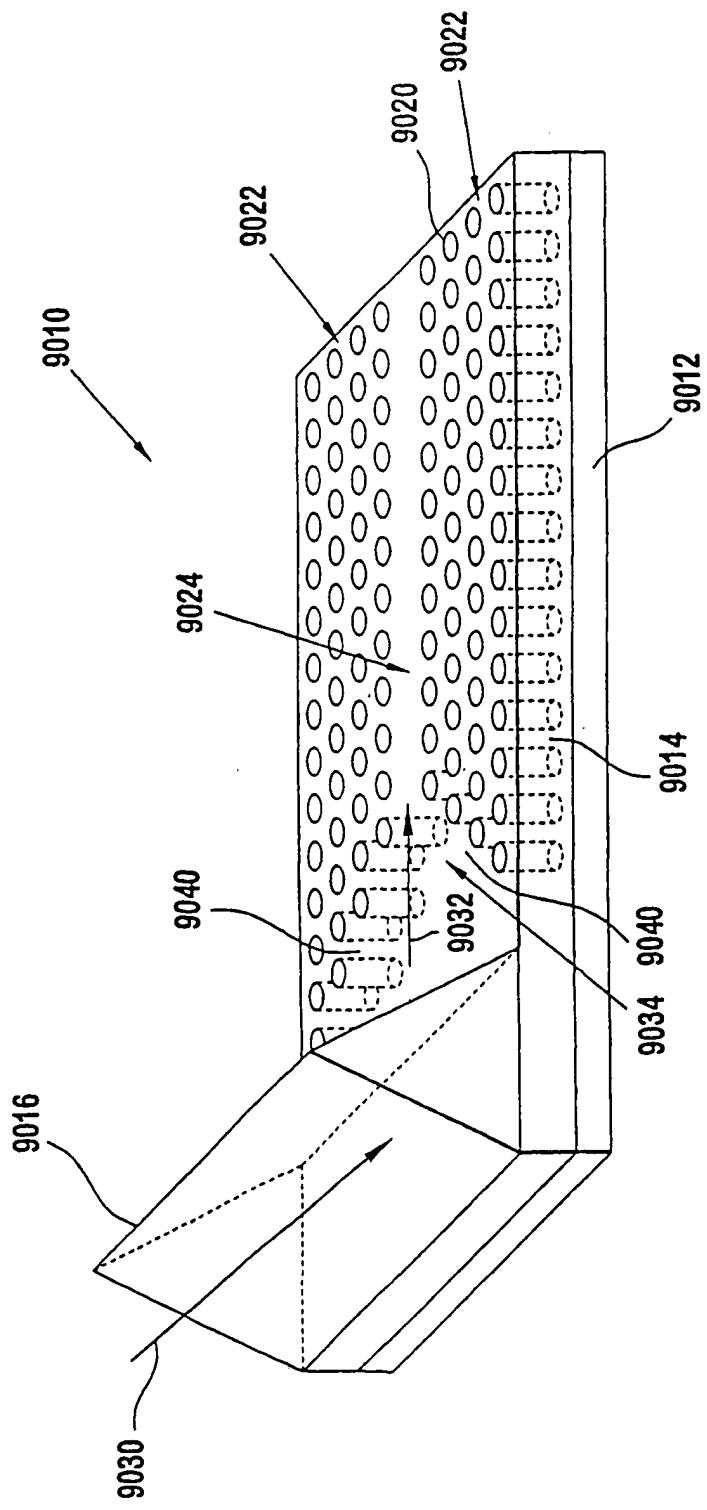


FIG. 81

FIG. 82



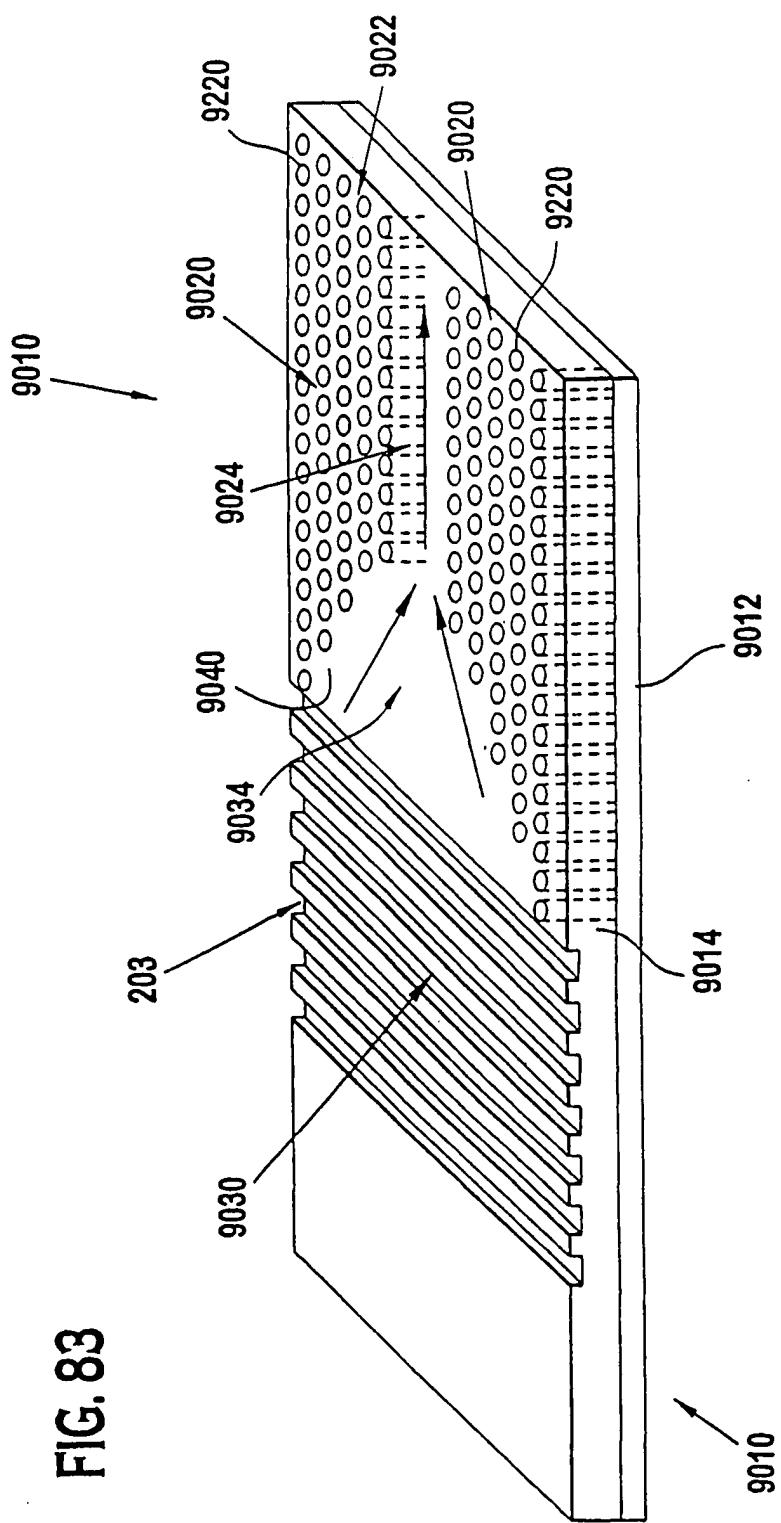


FIG. 83

50/55

FIG. 84

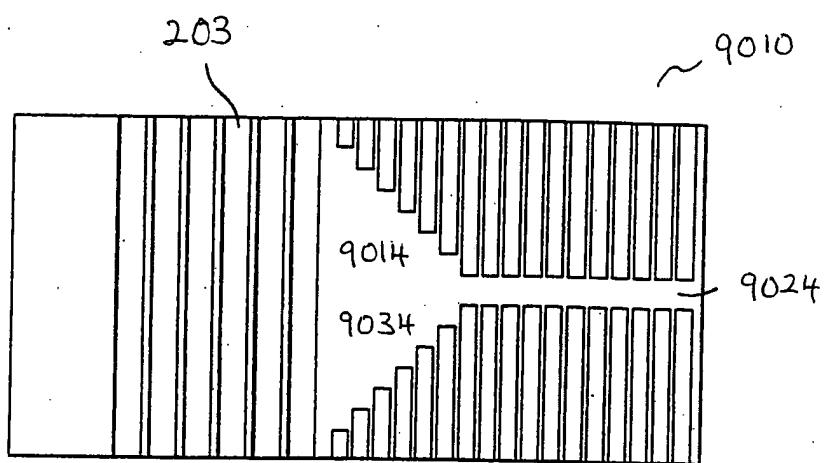
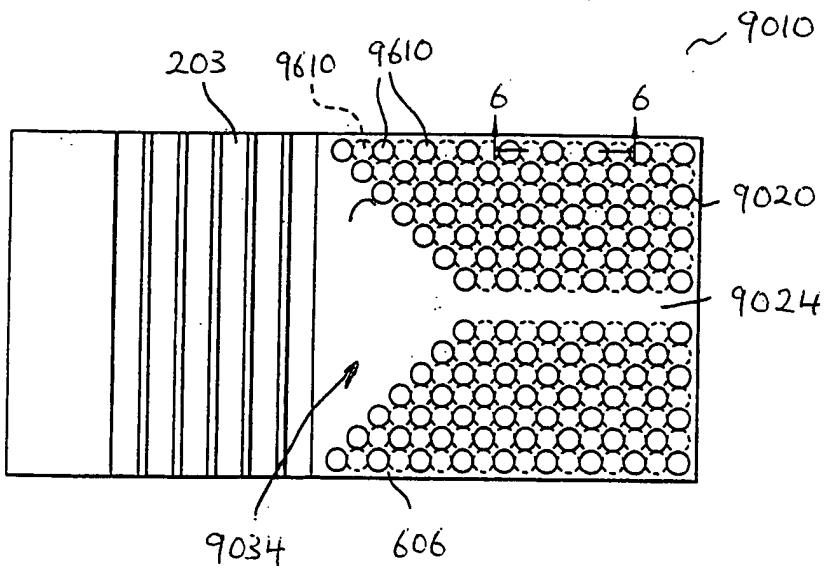


FIG. 85



51/55

FIG. 86

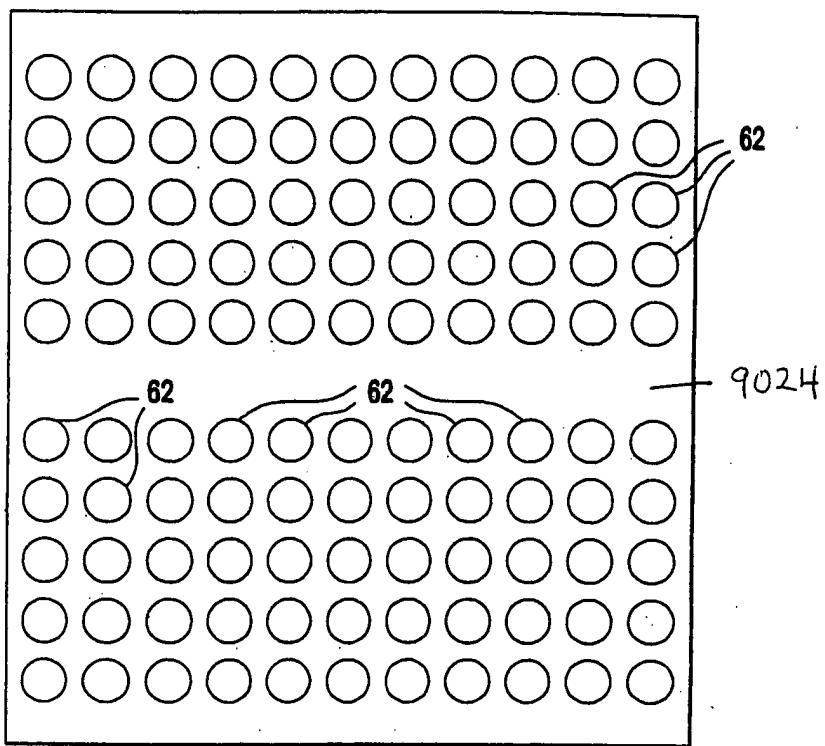


FIG. 87

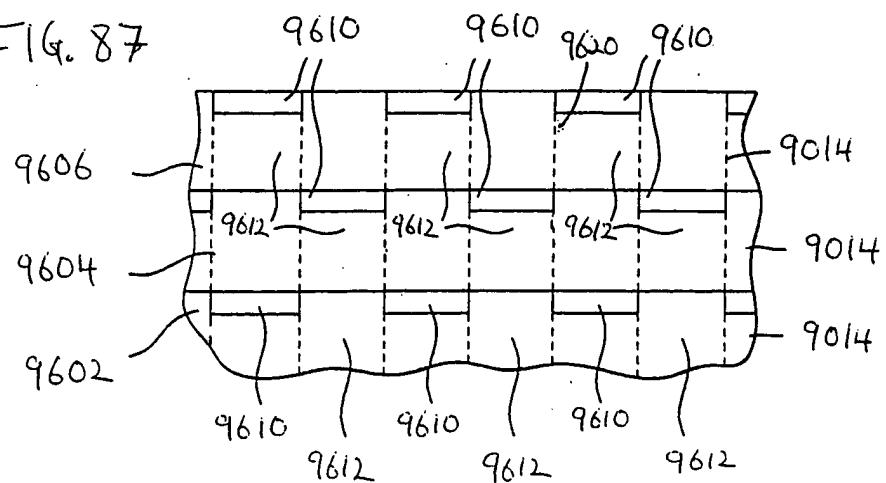
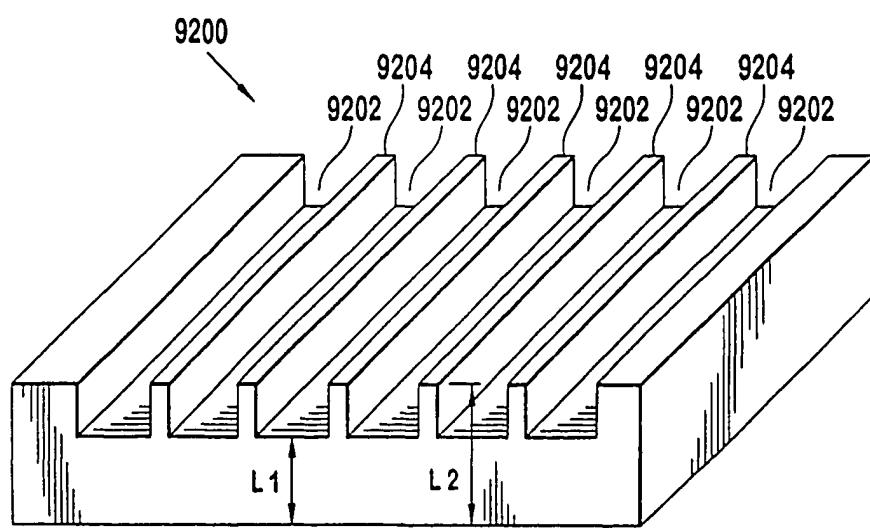


FIG. 88



53/55

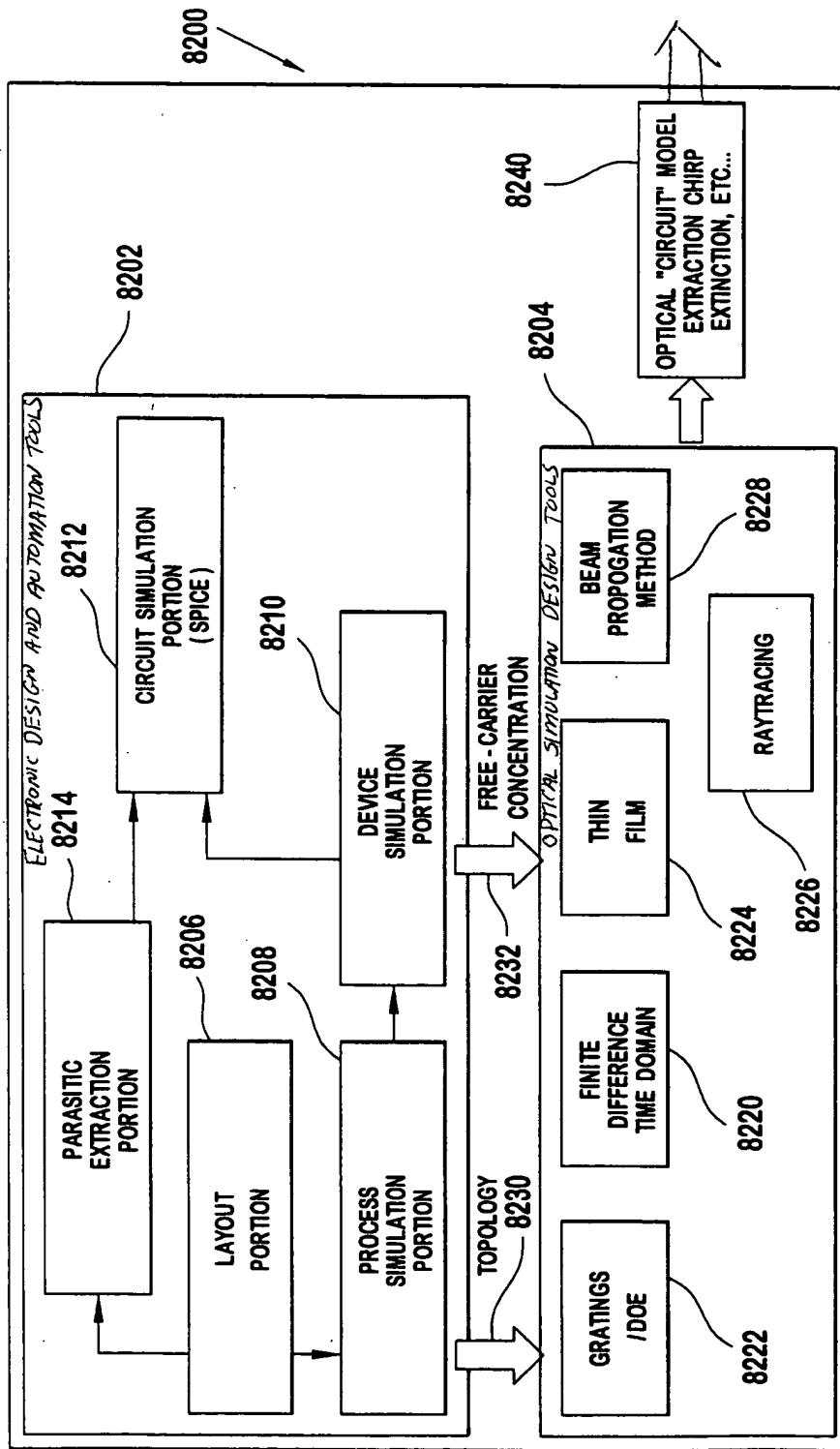


FIG. 8,9

54/55

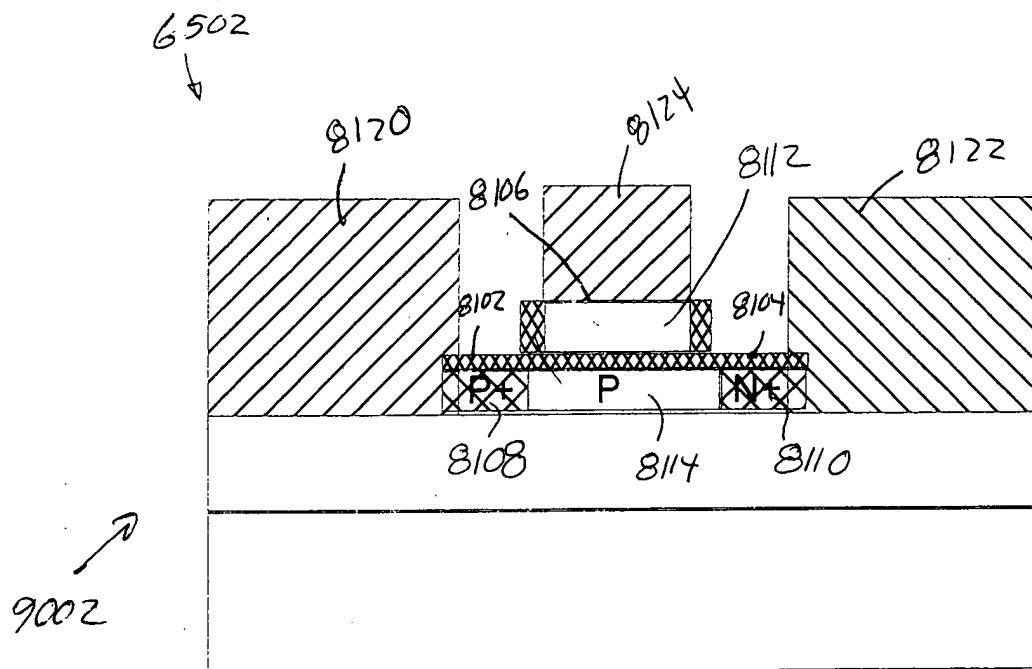


FIG. 90

55/55

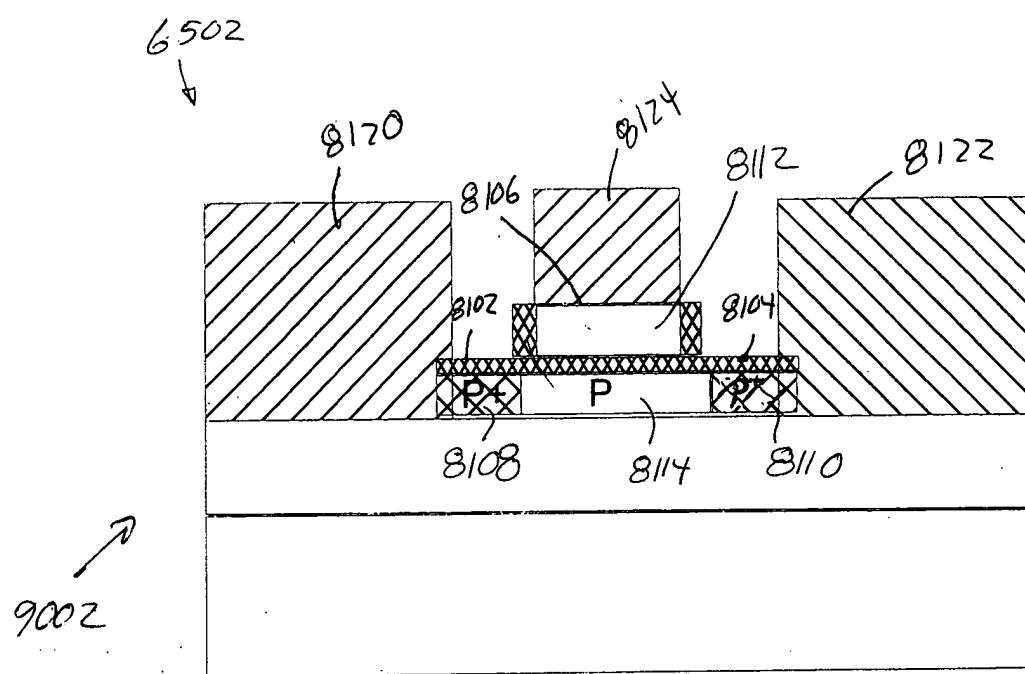


FIG. 91